Canon

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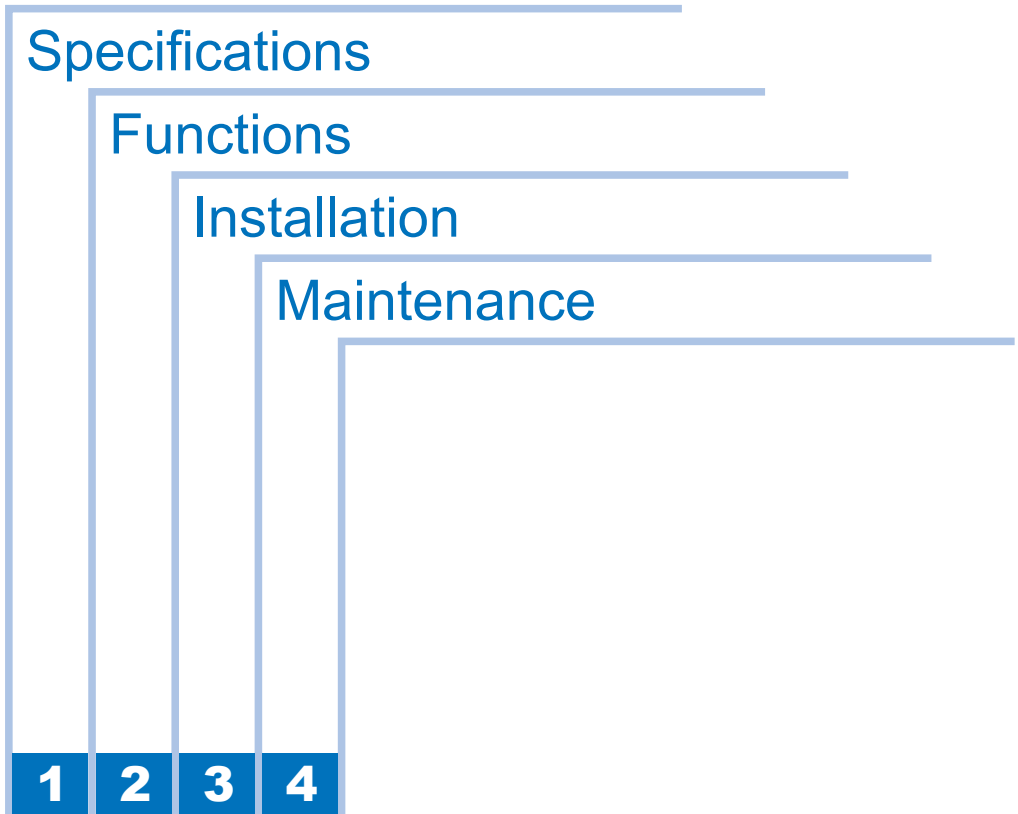
Universal SEND ADVANCE

Service Manual

- imageRUNNER ADVANCE 8105/8095/8085 Series
- imageRUNNER ADVANCE 6075/6065/6055 Series
- imageRUNNER ADVANCE 4051/4045/4035/4025 Series



Application

This manual has been issued by Canon Inc. for qualified persons to learn technical theory, installation, maintenance, and repair of products. This manual covers all localities where the products are sold. For this reason, there may be information in this manual that does not apply to your locality.

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Contents

Specifications

Specifications ---- 1-2
SEND Options ---- 1-2
Item on Restriction: ---- 1-3
Specifications ---- 1-4
E-mail transmission ---- 1-4
I-Fax Tx/ Rx function ---- 1-4
File transmission function ---- 1-4
Confirmed server applications ---- 1-4
Ipv6 environment ---- 1-5

Functions

Basic Function ---- 2-2
Authentication at TX ---- 2-2
POP before SMTP ---- 2-2
SMTP AUTH ---- 2-2
Authentication at RX ---- 2-5
APOP ---- 2-5
POP AUTH ---- 2-5
CRAM-MD5 ---- 2-5
NTLM ---- 2-6
PLAIN ---- 2-6
LOGIN ---- 2-6
Encrypted transmission ---- 2-8
Transmission packet encryption (SSL) ---- 2-8
Encrypted reception ---- 2-9
Encrypted POP Reception ---- 2-9
STLS ---- 2-9
Encrypted SMTP Reception ---- 2-9
MAC Address Block Function ---- 2-11
Receiving MAC Address Settings ---- 2-11
URL Send ---- 2-11
Setting for communicate SSL ---- 2-12
i-Fax Divided Data Transmission ---- 2-13
E-Mail Divided Data Transmission ---- 2-14
E-Mail Divided Data Reception ---- 2-15
USB Deactivation ---- 2-16
USB Device On/Off ---- 2-16
USB Host On/Off ---- 2-16
Location of Parameters ---- 2-16
Document Orientation Auto Detection ---- 2-17
Document Name OCR ---- 2-17
BOX back up ---- 2-18
System configurations ---- 2-18
Data to be backed up ---- 2-18
Data to be initialized at the restoration ---- 2-18
Backup destination settings ---- 2-18
Execution of the backup ---- 2-19
Data of the backup destination ---- 2-19
Execution of the restoration ---- 2-19
Security ---- 2-20
Activation of SSL for RUI ---- 2-20
Transmission File Format ---- 2-21
Increased Support of File in a Box ---- 2-21
Compact Transmission ---- 2-21
Support of Compact/OCR (text searchable) Transmission ---- 2-21
Support of Trace & Smooth ---- 2-21
Limit of Reception Length of Extra Long Original ---- 2-22
Restriction of Paper Type Information Delivery ---- 2-22
Paper Type Support: ---- 2-22
Restriction of Paper Type Information Delivery: ---- 2-22
HDD Data Erase Kit ---- 2-23
Types of user data erased ---- 2-23
HDD Data Erase ---- 2-23
Turn the host machine's main power supply OFF/ ON ---- 2-23
HDD Data Erase timing settings ---- 2-23
HDD Data Erase mode settings ---- 2-23
Related service modes ---- 2-24
IP Address Range Settings ---- 2-25

Protocol-Related Setup----2-26
Protocols and Applications Concerned ----2-26
RUI Log-in Procedure----2-26
cc/bcc Settings ----2-26
Send to Myself----2-27
WebDAV Support ----2-27
Points to Note About Using WebDAV ----2-27
IPv6 setting display list ----2-28
Encrypted PDF ----2-29
Caution: ----2-29
Notes: ----2-29
Digital Signature PDF----2-30
Searchable PDF/XPS----2-32
Display Host Name(Device Information Delivery Settings)----2-33
Display IP Address ----2-33
Display Host Name ----2-33
SSOH(Single Sign-On Hybrid) ----2-35
XPS(XML Paper Specification)----2-36
USB Keyboard support----2-36
Restrictions----2-36
Initialization of all data and settings ----2-37
Limitations: ----2-37
Data to be erased ----2-37
Data not to be erased ----2-37
How to erase ----2-38
How to erase the data collectively: ----2-38
Specification of erasing the data: ----2-38
HDD----2-39
The number of rewriting the hard disk ----2-39

Installation

Installation Procedure----3-2
Overview of the Installation Procedure---- 3-2
Device Signature PDF---- 3-3
Overview ---- 3-3
Registering the License Information ---- 3-3
Generating the CA Certificate and Key for the Machine Signature Function 3-3
Transmitting a Machine Signature PDF File ---- 3-4
Making SSOH Settings---- 3-5
Enabling SSOH Using the SMS ---- 3-5
Registering SSOH Users ---- 3-6
User Signature PDF---- 3-8
Overview ---- 3-8
Registering the License Information ---- 3-8
Sending a User Certificate Through an RUI to an iR Machine ---- 3-8
Obtaining a User Certificate ---- 3-8
Installable certificate format: ---- 3-9
Checking the User Key and Certificate List ---- 3-9
Transmitting a PDF File with a User Signature ----3-10
User Signature creation ----3-12

Maintenance

Notes when service----4-2
Other Points to Note ---- 4-2
Recommended setting of system management information---- 4-2
Creating SSL Key-Pair and Server Certification ---- 4-3
Generating key-pair and server certification ---- 4-3
CA-KAY ---- 4-5
User data Erase of the HDD ---- 4-6
For a machine where the HDD Data Encryption Kit is installed ---- 4-6
In the case that the HDD Data Encryption Kit is not installed ---- 4-6
How to create WebDAV environment for verification ---- 4-7
Add the FrontPage 2002 Server Extensions ---- 4-7
Open WebDAV Folder ----4-12
Transmission Setup from the iR ----4-12
Reference: ----4-13
IPv6 settings ----4-14
IPv6 address automatic settings ----4-14
IPv6 address confirmation from a Windows Vista PC ----4-14
Local area connection confirmation from a Windows Vista PC ----4-15
IPv6 connection confirmation from the iR main unit touch panel ----4-16
Related Service Modes List----4-17
Service mode comparative table----4-19
Related Error code---- 4-21

Confirm method of error code ----------4-21
E-mail Transmission errors----------4-22
I-Fax Transmission errors----------4-25
I-Fax Reception errors----------4-27
SMB Transmission errors----------4-29
FTP Transmission errors----------4-31
Box Transmission errors ----------4-33
WebDAV Transmission errors ----------4-34
Related Service Mode ---------- 4-37
Invalidating the License for Transfer to a Different Device (Level 2)-4-37
Possible Situation ----------4-37
Invalidation Procedure ----------4-37
Installation Procedure ----------4-37
Screen Design: ----------4-37

Explanation of Symbols

The following symbols are used throughout this Service Manual.

Symbols	Explanation
	Using it for general attention, warning, a notice of the danger that does not specify.
	Using the possibility of the electric shock for notice to be careful to.
	Mention about written item in the copier BASIC series to understand mention contents.

T-0-1

The following rules apply throughout this Service Manual:

1. Each chapter contains sections explaining the purpose of specific functions and the relationship between electrical and mechanical systems with reference to the timing of operation.
   In the diagrams, represents the path of mechanical drive; where a signal name accompanies the symbol, the arrow indicates the direction of the electric signal.
   The expression "turn on the power" means flipping on the power switch, closing the front door, and closing the delivery unit door, which results in supplying the machine with power.

2. In the digital circuits, '1' is used to indicate that the voltage level of a given signal is "High", while '0' is used to indicate "Low". (The voltage value, however, differs from circuit to circuit.) In addition, the asterisk (*) as in "DRMD*" indicates that the DRMD signal goes on when '0'.
   In practically all cases, the internal mechanisms of a microprocessor cannot be checked in the field. Therefore, the operations of the microprocessors used in the machines are not discussed: they are explained in terms of from sensors to the input of the DC controller PCB and from the output of the DC controller PCB to the loads.

The descriptions in this Service Manual are subject to change without notice for product improvement or other purposes, and major changes will be communicated in the form of Service Information bulletins.
All service persons are expected to have a good understanding of the contents of this Service Manual and all relevant Service Information bulletins and be able to identify and isolate faults in the machine.

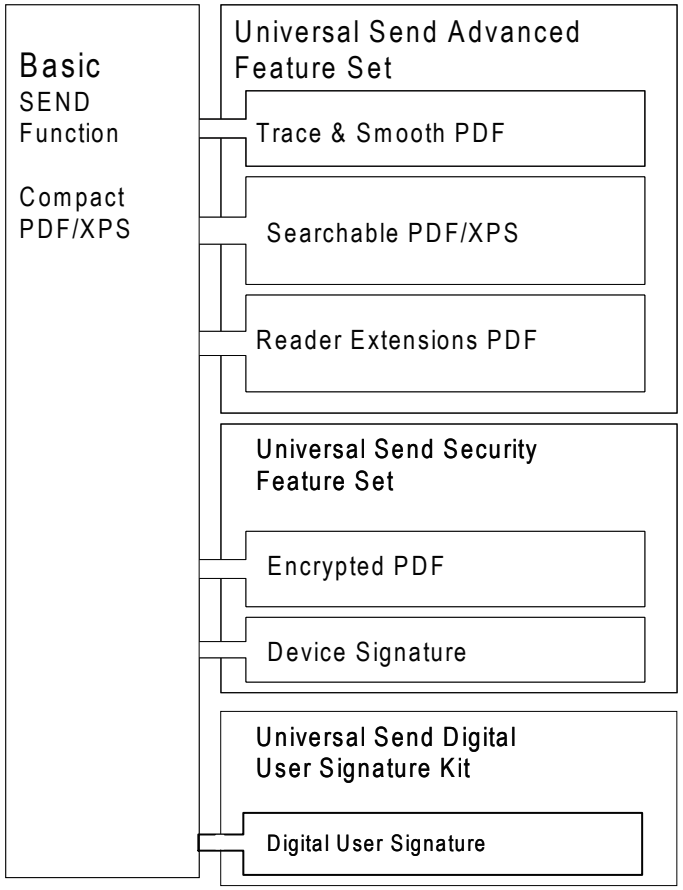
Specifications

Specifications

Specifications

SEND Options

A SEND function may be used to add to the existing transmission functions or to Adobe Acrobat PDF/XML paper specification-related functions.
Individual options are enabled after enabling the SEND transmission function and then obtaining an appropriate license. There is no specific order as to which license option to enable first. Except for Except for Trace & Smooth, all options may be enabled independently of one another.



F-1-1

The individual option functions are characterized as follows:

Scalable PDF	This function outlines text in a scanned image so that a fine image is displayed without jaggies even when it is enlarged.
Encrypted PDF	This function sets up a password for a document, which is a basic function of Acrobat. Two types of passwords can be selected; one is needed to open the document, and the other is needed to edit the document. To make this function available, it is necessary to enable the license for SEND Security Kit -C1.
Digital User Signature PDF/ XPS	This function generates a PDF document by embedding the user information for which SDL or SSO (Single Sign-On Hybrid) was performed or that recorded in the IC card into a scanned image. The embedded user information can be checked in the signature tab when the document is opened with Acrobat Reader. To make this function available, it is necessary to enable the license for Digital User Signature Kit - C1 and install the key pair and user certificate on the computer using the remote UI. Additional Functions > Setting the user key and certificate > Installation Checking the key pair and user certificate System Settings > Network Settings > TCP/IP Settings > Certificate Settings > List of keys and certificates > List of user keys and certificates > Selecting the target key pair > Certificate Details > Certificate Verification
Device Signature PDF/XPS	This function generates a PDF document by embedding encrypted information of the device name or serial number into a scanned image. The embedded device information can be checked in the signature tab when the document is opened with Acrobat Reader. To make this function available, it is necessary to enable SEND Security Kit - D1 and generate a certificate and key pair for the device signature under System Settings. System Settings > Network Settings > TCP/IP Settings > Certificate Settings Generate Key > Start key Generate Checking the key pair and device certificate System Settings > Network Settings > TCP/IP Settings > Certificate Settings > List of keys and certificates > List of keys and certificates for this machine > Device Signature Key > Certificate Details > Certificate Verification
Reader Extension	PDF file which edited by this function, can be edited by not only Acrobat but also Acrobat Reader. This gives, it is not necessary to purchase Acrobat or print paper to pass a circular document.

Adobe Life Cycle Rights Management	Function to create a PDF of scanned document to which the policy information is added by linking with the Rights Management server. Since the function adds policy information to documents and centrally manages the rights on the Rights Management server, permission/restriction to view, print or copy is possible even after the document is distributed. There is not a button on UI at the time of the shipment. So turn on Adobe Rights Management function with service mode after customer made user's registration in Adobe company. At the time of PDF sending, the button which can generate PDF with Policy appears. But it is covered by gray, and disable to choose it. Appointing the URL of the server with User mode make it possible to clear and push the button.
PDF/A-1b	A PDF format to save it for a long term used in government organizations.

T-1-1

Item on Restriction:

For the electronic signature-attached PDF transmission, user can send with any combination of signature-registering method (device signature, user signature).
User, however, need to take care of the following points to note.

- In the case of selecting multiple signature-registering methods, signature is attached by the order of the following: Device Signature => User Signature.
- In the case of setting multiple signature-registering methods, and opening the signature-attached PDF by Acrobat, only the last-attached signature is valid as a specification of Acrobat (PDF).

When the signature was added, some changes were generated in PDF.
The signature that proves the state before enters the falsified state.
This is the same meaning as the addition of the change to PDF.
Warning that 'There have been subsequent changes to the document' to the property of the signature.

- To execute user signature, SSOH has to be used.

Specifications

<SEND function basic specifications>

E-mail transmission

- Transmission protocol: SMTP, POP3
- Transmission authentication: SMTP AUTH, POP before SMTP
- Reception authentication: POP3, APOP, POP AUTH
- Encoded transmission: Corresponds to SSL communication in each protocol when SMTP transmission and SMTP and POP reception. (The server side needs to correspond.)
- Key and certificate: Server certificate that the device has is used when SSL communication.
- Supported formats: TIFF (monochrome), JPEG(color), PDF (monochrome, color), PDF/XPS(high compression)(color), PDF/XPS (OCR) = Searchable PDF, Encrypted PDF, Trace&Smooth PDF, Device Signature PDF/XPS, Digital Signature PDF/XPS.
- PDF files can be split and sent page by page.
- Resolution: 100 X 100, 150 X 150, 200 X 100, 200 X 200, 200 X 400, 300 X 300, 400 X 400, 600 X 600 (dpi)
- Document size: A3 to A5
- Addresses available from LDAP server (e-mail address and FAX telephone number)

Max. number of searching: 2000; The number of broadcasting selection after searching: 64

- No E-mail reception function. Error mails can be printed out.

When broadcasting transmission, display/write all the addresses in the To: field and separate every 100 addresses to send.

I-Fax Tx/ Rx function

- Transmission protocol: SMTP (Tx/ Rx), POP3 (Rx), I-Fax (Simple mode, Full mode)
- Transmission authentication: SMTP AUTH, POP before SMTP
- Reception authentication: POP3, APOP, POP AUTH
- Encoded transmission: Corresponds to SSL communication in each protocol when SMTP transmission and SMTP and POP reception. (The server side needs to correspond. When the server-less transmission, the encoded transmission is not executed.)
- Key and certificate: Server certificate that the device has is used when SSL communication.
- Supported formats: TIFF (monochrome: MH, MR MMR)
- Resolution: monochrome:200 X 100, 200 X 200, 200 X 400, 300 X 300, 400 X 400, 600 X 600 (dpi)
- Document size: A3, A4
- Reception sizes: A3, A4
- Server-less transmission supported
- Addresses available from LDAP server (e-mail address and FAX telephone number)

Max. number of searching: 2000; The number of broadcasting selection after searching: 64

- When broadcasting transmission, display/write all the addresses in the To: field.

File transmission function

- Transmission protocol: SMB (NetBios over TCP/IP), FTP(TCP/IP), WebDAV(HTTP)
- Supported formats: TIFF (monochrome), JPEG(color), PDF/XPS (OCR), Searchable PDF, Encrypted PDF, Trace&Smooth PDF, Device Signature PDF/XPS, Digital Signature PDF/XPS.
- PDF files can be split and sent page by page.
- Resolution: 100 X 100, 150 X 150, 200 X 100, 200 X 200, 200 X 400, 300 X 300, 400 X 400, 600 X 600 (dpi)
- Document sizes: A3, A4
- CanonFTP automatically distinguishes responses from the server and switches operation accordingly.

Confirmed server applications

	Service	Protocol	Applications	OS
SEND	eMail	SMTP	Sendmail 8.12.5 or later	UNIX
			Exchange Server 5.5 + SP1	WinNTS
			Domino R4.6 or later Domino 6.5	WinNTS
	File	FTP	FTP Server	UNIX
			FTP Server(IIS4.0, 5.0, 6.0)	WinNTS
			FTP Server	Mac OS X
		SMB	Windows File System	WinNTS
			Samba2.2/3.0	RedHat Linux 7.2 Mac OS 10.2
Report	Error Mail Report	SMTP	Sendmail 8.93	UNIX
		POP3	qpopper 2.53	UNIX
		SMTP, POP3	Exchange Server 5.5 + SP1	WinNTS
			Domino R4.6 or later	WinNTS

Mail client for SMTP certification required

Outlook2000

- OutlookExpress5
- Becky! 2.0.5
- WinBiff 2.42
- Eudora 5.1-J
- PC-Pine 4.50
- Netscape 7.01
- Mozilla 1.2.1

File transmission of environment

WebDAV

- Sun Solaris 2.6 or later + Apache2.0
- Red Hat Enterprise + Apache2.0
- Linux AS/ES/WS 4.0 or later + Apache2.0
- Windows 2000 Server + Apache2.0
- Windows 2000 Professional/Server + IIS5.0
- Windows XP Professional + IIS5.1/Apache2.0
- Windows Server 2003 + IIS6.0/Apache2.0
- Mac OS X + Apache1.3

Ipv6 environment

Email / IFAX

- OS (SUN): Solaris9
- SMTP : Sendmail : 8.13.5
- POP3 : Qpopper : 4.0.8
- SSL : OpenSSL : 0.9.8

WebDAV

- OS (SUN) : Solaris9
- WebDAV : Apache : 2.0.5.8

- OS : WindowsServer2003
- IIS : 6.0

- OS : WindowsXP
- IIS : 5.1

FTP

- OS : Solaris9
- OS Standard FTP server wu-2.6.2

- OS : MacOS X 10.3
- OS Standard FTP server(tnftpd 20040810)

LDAP

- OS (SUN) : Solaris9
- Open LDAP 2.3.31

SMB

- Windows XP
- Windows VISTA
- Windows Server 2003
- Windows Server 2008

2 Functions

Basic Function

Basic Function

Authentication at TX

When the mail server is set on the internet, you need to prevent from Third Party Mail Relay that the third party uses the false name. Third Party Mail Relay means that the third party sends large amount of spam mails using the mail server which other people are operating. If you do not take any measures for this, resources like server and network lines are exhausted and at the same time, you will get the claim from the user who received the spam mail. As a measure, the authentication operation when SMTP transmission is prepared.
In case of the inner network (LAN), you can prevent from Third Party Mail Relay by restricting the IP address and the domain name. In order to send from the outside domain using the mail address or securely use the mail server set on the internet which the provider prepares, the authentication is indispensable at the transmission. This machine uses two authentication methods, POP Before SMTP and SMTP AUTH and they enable to send i-FAX and e-mail to SMTP server which requests the sender's authentication.

POP before SMTP

With this method, before SMTP transmission is performed, the POP server is logged into. SMTP transmission can only be continued once the POP server has confirmed the IP address of the connected client as authorized within a specific period of time. After user authentication is carried out at the POP server, the authenticated client IP address is relayed to the SMTP server, where it is processed. The process requires a certain amount of time. Taking this processing time into consideration, there is an idle period of 300msec, from POP authentication to the start of SMTP transmission. If a POP before SMTP transmission is generated during POP reception, POP authentication is made to wait until the reception is finished and then POP authentication and SMTP transmission are performed. Errors occurring while the POP server is connected are treated as transmission errors.

With regard to the actual programming, all that is necessary is for Settings / Registration > Function Settings > Send > E-Mail/ I-Fax > Communication Settings > Authent./ Encryption > POP Authentication bofore Sending to be set to ON.

Related new user error codes are #810 and #813. For details, refer to Troubleshooting.

SMTP AUTH

In SMTP AUTH, user authentication is performed when the SMTP server is connected, so that mail can only be received from registered users. This method was standardized in March, 1999, as RFC2554. SMTP AUTH uses ESMTP protocol, which is an extension of SMTP, and uses the SASL (Simple Authentication and Security Layer) authentication mechanism, standardized as RFC2222, to authenticate the user by sending the user name and password information in response to the server challenge data.

<Authentication mechanisms>
The SMTP server can have multiple authentication mechanisms and the most suitable authentication mechanism is programmed in accordance with the security policy decided by the SMTP server administrator. The client E-Mail client application selects the authentication algorithm from among the available authentication mechanisms and performs authentication upon transmission.
This model supports the following five types of authentication mechanism.

CRAM-MD5
Challenge-Response Authentication Mechanism, computed by using the key-protected MD5 algorithm by HMAC-MD5 (RFC2104)

NTLM
Windows NT authentication method
User name must be set in the form 'username@NTdomainname'
E.g.:
Windows2000 or earlier: username\\CANON (domain name may be omitted, depending on the environment)
Windows2000: username@canon.co.jp (domain name may be omitted, depending on the environment)

GSSAPI
Authentication system using Kerberos Version 5 (RFC1510)
User name must be set in the form 'username@realmname'.
username@CANON.CO.JP
(In Exchange2000, realm name = domain name)

PLAIN
Assumes that user name and password are sent as plain text (BASE64 encoded) and the communication packet is encoded. (RFC2595) Allows secure authentication when used in

combination with the encoded transmission described later.

LOGIN
Sends the user name and password as plain text (BASE64 encoded). Actual transaction is the same as with PLAIN. Similarly, allows secure authentication when used in combination with encoded transmission.

<SMTP AUTH transmission operation>
Even if the unit is programmed for transmission with SMTP AUTH, if the mail server does not support SMTP AUTH and the encoding system supported by the server does not match that supported by this model, SMTP AUTH transmission will not be possible. In that case, even if SMTP AUTH is programmed, transmission will be by normal SMTP and there will be no transmission error generated. If an unauthenticated mail transmission is attempted to a server that will not allow such transmission, subsequent SMTP protocols will generate an error in the mail server. Unauthenticated mail can be transmitted to a server that will accept such transmission. These security policies are determined by the server so, even if SMTP AUTH is not programmed, it is impossible to tell whether transmission is possible without checking with the customer's server administrator.

<Authentication protocol>
Examples of transmission protocol using SMTP AUTH are given below.
The EHLO response from the client tells whether SMTP AUTH is supported by the server and the authentication algorithm being used at that time is described. In the event that there are multiple authentication algorithms, multiple algorithm names are described. The client selects one of the relayed authentication algorithms and then relays it on to the server. Server challenge data come from the server and coded data made up from the server challenge data, user name and password are returned in response for authentication. In general, the authentication algorithm to be used can be selected on the server side and PLAIN and LOGIN authentication and others which are undesirable from the perspective of security can be blocked by the server setting. (Security policy is determined by the server.)

Server:220 smtp.example.com ESMTP server ready
Client(iR):EHLO ifax.example.com
S: 250-smtp.example.com
S: 250-DSN
S: 250-EXPN
S: 250 AUTH CRAM-MD5 DIGEST-MD5 : <- server declares authentication algorithm
C: AUTH CRAM-MD5 : <- client selects CRAM-MD5
S: 334 : <- server response (subsequently, authentication begins with CRAM-MD5.)
S: PENCeUxFREJoU0NnbmhNWitOMjNGNndAZWx3b29kLmlubm9zb2Z0LmNvbT4=
C: ZnJlZCA5ZTk1YWVlMDljNDBhZjJiODRhMGMyYjNiYmFlNzg2ZQ==
S: 235 Authentication successful.

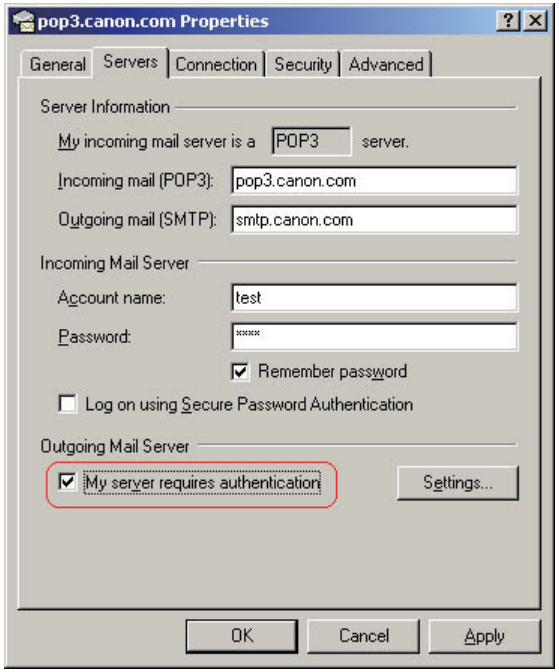
<Authorisation algorithm selection>
Where the SMTP has multiple authentication mechanisms, selection is made in the order of the priority list given below.

1) CRAM-MD5
2) NTLM
3) GSSAPI
4) STARTTLS operation PLAIN
5) STARTTLS operation LOGIN
6) STARTTLS non-operation LOGIN
7) STARTTLS non-operation PLAIN

Authentication methods can be disabled in service mode. When the service mode value is set to '1', the encoding system can be disabled. (The default setting is all enabled.) Ordinarily, the default setting is used, but if the server administrator wants to disable a particular encoding system, the settings need to be changed by the service mode settings.

<SMTP AUTH related user modes>
For the actual SMTP AUTH settings, system administrator settings > network settings > E-Mail/ I-Fax > Authent./ Encryption > SMTP Authentication (SMTP AUTH) should be set ON and the required user names and passwords for SMTP AUTH need to be entered. If SSL permission, which is the encoded transmission setting, described later, is ON, with PLAIN and LOGIN authentication, the authentication encoded by the STARTTLS command can be used.

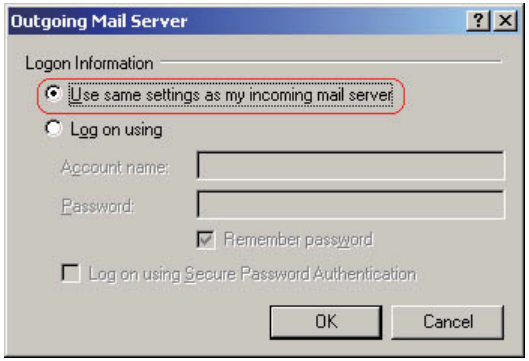
<Outlook Express example>
For reference, this section describes what happens to the Outlook Express settings when using an SMTP server that supports SMTP AUTH. Outlook Express PLAIN authentication only.
1) From the Outlook Express tools menu, select Accounts. In the example, pop3.canon.com is selected.
2) From Internet Accounts, select the desired account and click on Properties. In the example, the pop3.canon.com server tab has been selected from the Properties window.
3) Put a check in the 'My server requires authentication' box against the OutGoing mail server.



F-2-1

4) Press the settings button that has been made active.

5) Programme the transmission mail server window's logon information. In the default, 'use same settings as my incoming server' is selected. This setting uses the POP3 authentication account name and password entered against the reception mail server in the previous window and performs SMTP AUTH operation.



F-2-2

If 'Log on using' is selected, the account and password to be used with SMTP AUTH can be specified individually. In that case, if 'Log on using Secue Password Authentication' is selected, encoding is carried out by TSL(SSL), using the STARTTTLS command.

<SMTP AUTH related user error codes>

The related new user error codes are #839 and #843. For details, refer to the section on Troubleshooting.

Authentication at RX

The username and the password flow by the plaintext in the reception form by past POP3. And POP3 logs in POP server at a short cycle. Therefore, the password is easily stolen in POP3.
Enable the password to encrypt and to be attested by using APOP and POP AUTH. APOP is defined by RFC1939, and executed with UNIX system POP server, and POP AUTH is defined by RFC2449, and executed with the MS Exchange server.In addition, if POP server supports the SSL(TLS) encryption by the STLS instruction, not only the password but also the entire reception packet can be encrypted.

"POP AUTH Method " exists in Settings Registration >Function Settings >Send >E-mail/I FAX >Communication Settings >Authent./Encryption , and it is possible to select it from Standard / APOP / POP AUTH .
APOP and POP AUTH are executed respectively when APOP and POP AUTH are selected, and when Standard is specified, the authentication by the username and the password is executed.
Default: It is Standard.

APOP

APOP authentication procedures are as follows.
(1) As a greeting message when connecting to POP server, the server returns the character strings consisting of the time stamp and the host name to the client. The client links these character strings with the password character strings, and creates the message digest by MD5 from the linked character strings.
(2) With the APOP command, the client returns the message digest created with the user name to the server.
(3) Message digest is created in the POP server with the same algorism. By comparing this created digest and the digest from the client, if both digests are the same, the password is considered as the correct one.

Greeting message when connecting to the server includes the time stamp, so analyzing is difficult since the created message digest changes every time.

Different from the POP AUTH described later, there is no protocol to check whether or not the server is supporting APOP from the client, so the user have to decide whether or not APOP is used and set User mode.
If the server does not support APOP and the user uses APOP, an error occurs. When the error occurs at the APOP authentication, "APOP Authentication Error" is displayed on the status line for certain time.

Following items are the examples of communication.
S: +OK POP3 server ready <1896.697170952@dbc.mtview.ca.us>
C: APOP mrose c4c9334bac560ecc979e58001b3e22fb
S: +OK maildrop has 1 message (369 octets)
C: :

When the server connection, the password "tanstaaf" character strings of the user mrose is linked after "<1896.697170952@dbc.mtview.ca.us>" message. Character strings of "<1896.697170952@dbc.mtview.ca.us>tanstaaf" is hashed by MD5, then it becomes "c4c9334bac560ecc979e58001b3e22fb".
For actual settings, set as follows. System Settings > Network Settings > E-mail/I-Fax > Authent./ Encryption > POP AUTH Method >APOP.

POP AUTH

POP AUTH uses the authentication mechanism of SASL(Simple Authentication and Security Layer) provided in RFC2222 and conducts the user authentication by returning the user name and password information as a response to the server challenge and its data from the server. This is standardized as RFC1734 "POP3 AUTHentication command". By the CAPA command extended in RFC2449 "POP3 Extension Mechanism", you can know the capability which the server has, and SASL authentication algorism which the server supports is included in one capability and returned by the SASL tag.

<Authentication mechanism>
In the POP server, multiple authentication mechanisms can be possessed and the authentication mechanism is set according to the security policy which the server administrator decides. E-mail client application selects the authentication algorism from the specified authentication algorism and performs the authentication at the transmission. This device supports the following authentication algorism.

CRAM-MD5

Challenge-Response Authentication Mechanism calculated using MD5 algorism with the key based on the HMAC-MD5 (RFC2104).
Note:
Currently, POP AUTH server in the field are mostly made by Microsoft and NTLM

authentication is used. CRAM-MD5 is installed, but there is no server which the operations are checked, so the evaluation has not performed. For this reason, POP AUTH operations with CRAM-MD5 are not supported.

NTLM

Authentication method of Windows NT
User name has to be set in the form of "User name@ NT domain name".

Example:
Windows2000 or former: User name\\CANON (Domain name can be omitted according to the environment.)
Windows 2000: User name@canon.co.jp (Domain name can be omitted according to the environment.)

PLAIN

Authentication method that user name and password are transmitted in plaintext (BASE64 encode) and the packet is encrypted. (RFC2595) By applying with the later "Encrypted transmission", the authentication is secured.

LOGIN

User name and password are transmitted in plaintext (BASE64 Encode). Actual method of communicating information is same as PLAIN. By applying with the later "Encrypted transmission", the authentication is secured.

Note:
When SSL is not operated, the authentication of PLAIN and LOGIN is not encrypted, so there is no difference from the authentication of the plaintext USER/PASS. For this reason, there is no meaning of using POP AUTH. This operation gives misunderstanding that it is encrypted, so operations with POP AUTH are prohibited.

< POP AUTH reception operations>
Even POP AUTH is set to be used for receiving, if the mail server does not support POP AUTH, the server supporting-authentication method and the device supporting-authentication method are different, the reception with POP AUTH is impossible. In this case, "POP AUTH Encryption Error" is displayed on the status line.

<Authentication protocol example>
Examples of transmission protocol when using POP AUTH are shown below.
With the CAPA response from the client, supporting SASL is informed from the server. At this time, usable authentication algorism is described. If multiple authentication algorisms are possessed, multiple algorism names are described. Client selects one algorism from the authentication algorisms which the server informed and the selected authentication algorism is informed to the server. The server sends the server challenge data, and performs authentication by returning this data and the encrypted data created from the user name and password as a response. Generally, the authentication algorism can be selected on the server side whether to be used. If it is not suitable to be used for the security, it can be prohibited by the settings on the server side. (Security policy can be determined by the server.)

Server: +OK POP3 v2001.78 server ready <4a61.3e55cd70@test.canon.co.jp>
Client(iR): CAPA
S: +OK Capability list follows:
S: TOP
S: LOGIN-DELAY 180
S: UIDL
S: STLS
S: USER
S: SASL CRAM-MD5 LOGIN
S: .
C: AUTH CRAM-MD5
S: + PDE5MDQ0LjEwNDU4MTEyMThAYmFiYS5jY20uY2Fub24uY28uanA+
C: ZnJlZCA5ZTk1YWVlMDljNDBhZjJiODRhMGMyYjNiYmFlNzg2ZQ==
S: +OK Authentication successful....
...

<Selection of the authentication algorism>
When SMTP server possesses multiple authentication mechanisms, the authentication method is determined in the following priority order.
1) CRAM-MD5 (Not supported)
2) NTLM
3) PLAIN when STLS (SSL) operation
4) LOGIN when STLS(SSL) operation
From Service mode, you can prohibit the usage of each authentication method. If you set Service mode setting to "1", you can prohibit the usage of the authentication method. (All defaults: usable)
Usually, the device is used with the default settings, but if the server administrator prohibits

the usage of the specific authentication method, you can change the setting by Service mode.

< POP AUTH-related Addtional Settings>
Actual POP AUTH-related setting is selected in the order of Settings /Registration > Function Settings > Send > E-mail/I-Fax > Communication Settings > Authent./ Encryption > POP AUTH Method > POP AUTH, and then you want to enter the user name and password necessary for POP address and POP password. When enabling "SSL Allow (POP)" (the setting of encryption communication), the encrypted authentication by STLS command can be used at PLAIN and LOGIN authentication.

Encrypted transmission

Transmission packet encryption (SSL)

When Settings /Registrations > Function Settings > Send > E-Mail/ I-Fax > Communication Settings > Authnt. /Encryption > allow SSL(SMTP send) is set to ON, and the mail server supports the SMTP protocol's STARTTLS command, SSL (TLS) is used for transmission packet encryption. Not only the user name and password are encrypted, but also all of the mail transmission data. Therefore, the transmission speed is slower.
If 'allow SSL(SMTP Semd)' is set to OFF, or the mail server does not support the SMTP protocol's STARTTLS command, the transmission packet is not encrypted.

<STARTTLS command>
STARTTLS is an SMTP command that tells the server that encrypted transmission (SSL/TLS) is about to start. The command is standardized in RFC2487. Following is an example of the protocol flow during STARTTLS.
The EHLO response from the client declares that STARTTLS is supported from the server. When the client generates the STARTTLS command, the operation is reprocessed from the starts and negotiation is initiated and the packet data are encrypted.

S: 220 mail.imc.org SMTP service ready
C: EHLO mail.example.com
S: 250-mail.imc.org offers a warm hug of welcome
S: 250-8BITMIME
S: 250-STARTTLS : <- Shows that the server supports STARTTLS.
S: 250 DSN
C: STARTTLS : <- Declares to server that SSL/TLS are to be performed.
S: 220 Go ahead
-- All subsequent transmission packets will be encrypted.
C: <starts TLS negotiation>
C&S: <negotiate a TLS session>
C&S: <check result of negotiation>
C: EHLO mail.example.com
S: 250-mail.imc.org touches your hand gently for a moment
S: 250-8BITMIME
S: 250 DSN

<User error>
Related new user errors are #841 and #842. For details, refer to the section on Troubleshooting.

Encrypted reception

There are two types of encrypted reception methods available - encrypted POP and SMTP email receptions.

Encrypted POP Reception

When Allow SSL (POP) control is turned on in Authentication/Encryption Settings window* and the POP server supports STLS command, defined in POP3 protocol, the imageRUNNER/iR can communicate with encrypted packets using SSL (TLS). The communications slows down since not only the user name and password but also the entire communication data for email reception are encrypted. If Allow SSL (POP) control is turned on but the POP server does not support STLS command of POP3 protocol, it results in an error. If an error occurs in POP SSL communications, the status line displays "SSL Error (POP)."

* Authentication/Encryption Settings window: opens by selecting Settings /Registration > Function Settings > Send > Email/I-Fax > Communication Settings > Authent./ Encryption.

STLS

An extended SMTP command, defined in RFC 2487. RFC 2449 -- POP3 Extension Mechanism -- specifies that STLS must support CAPA command. If a server supports STLS, it states the support in response to CAPA command.

The following lines exemplify communications when STLS is enabled.

...
S: +OK POP3 v2001.78 server ready <4a61.3e55cd70@test.canon.co.jp>
C: CAPA
S: +OK Capability list follows:
S: TOP
S: LOGIN-DELAY 180
S: UIDL
S: STLS :<-- Indicates the server supports STLS.
S: USER
S: SASL CRAM-MD5 LOGIN
S: .
C: STLS
S: +OK Begin TLS negotiation
<TLS negotiation, further commands are under TLS layer>
S: +OK POP3 v2001.78 server ready 4a61.3e55cd70@test.canon.co.jp

Encrypted SMTP Reception

The iR 2270 and later models support SSL (TLS) encryption for receiving email messages from SMTP servers. To use this feature, a valid server certificate is required. When SSL or On option is selected for Allow SSL (SMTP Receive)* and the email server supports STARTTLS command, the imageRUNNER/iR can communicate with encrypted packets using SSL (TLS). When Off option is selected for Allow SSL (SMTP Receive) control, the imageRUNNER/iR does not include STARTTLS in a response for EHLO. The communications slows down since not only the user name and password but also the entire data for email sending are encrypted. When Off option is selected for Allow SSL (SMTP Receive) or the email server does not support STARTTLS command of SMTP protocol, the communication packets are not encrypted.

*Allow SSL (SMTP Receive) control: is displayed by selecting Settings /Registration > Function Settings > Send > Email/I-Fax > Communication Settings > Authent./ Encryption.

STARTTLS Command

An extended SMTP command that notifies a start of encrypted communications in SSL/TLS to the SMTP server, defined in RFC 2487.

The following lines exemplify communications when STLS is enabled.

...
S: 220 mail.imc.org SMTP service ready
C: EHLO mail.example.com
S: 250-mail.imc.org offers a warm hug of welcome
S: 250-STARTTLS :<-- Indicates the server supports STARTTLS.
S: 250 DSN
C: STARTTLS : <--Declares the use of SSL/TLS.
S: 220 Go ahead
C: <starts TLS negotiation>
C & S: <negotiate a TLS session>
C & S: <check result of negotiation>
-- The communication packets are encrypted from now on --

C: EHLO mail.example.com
S: 250-mail.imc.org touches your hand gently for a moment
S: 250 DSN
C: MAIL FROM <ifax@mail.example.com>
S: 250 Sender OK
...

The client is notified with the response of EHLO that the server supports STARTTLS. When the client issues STARTTLS command, the server and client perform TLS negotiation and resume communications from the beginning with encrypted packet data.

If SSL option is selected for Allow SSL (SMTP Receive) control and the client carry on communicating in plain text, without using STARTTLS, the imageRUNNER/iR replies "530 Must issue a STARTTLS command first" of SMTP mail command and terminates the SMTP connection with the error. The user interface indicates "SSL Error (SMTP RX Reject)" in the status line.

If On option is selected for Allow SSL (SMTP Receive) control, the imageRUNNER/iR accepts communications with the client in plain text, without using STARTTLS. If an SSL processing results in an error, for example the imageRUNNER/iR does not feature an encryption algorithm common to the client, the user interface indicates "SSL Error (SMTP Receive)" and terminates the SMTP connection with the error.

Allow SSL (SMTP Receive) control defaults to Off.

MAC Address Block Function

Receiving MAC Address Settings

Limits network packets to receive by MAC address. To enable this function, select Settings/Registration > Preferences > Network > Firewall Settings > MAC Address Filter > RX Filter .On for Receiving MAC Address Settings. Up to 100 MAC addresses can be registered to allow communicating with the iR C/Color imageRUNNER. If a conflict occurs between Receiving MAC Address Settings and IP Address Settings, Receiving MAC Address Settings overrides IP Address Settings.

This function filters packets in the network layer and the reception logs for applications are not recorded.

URL Send

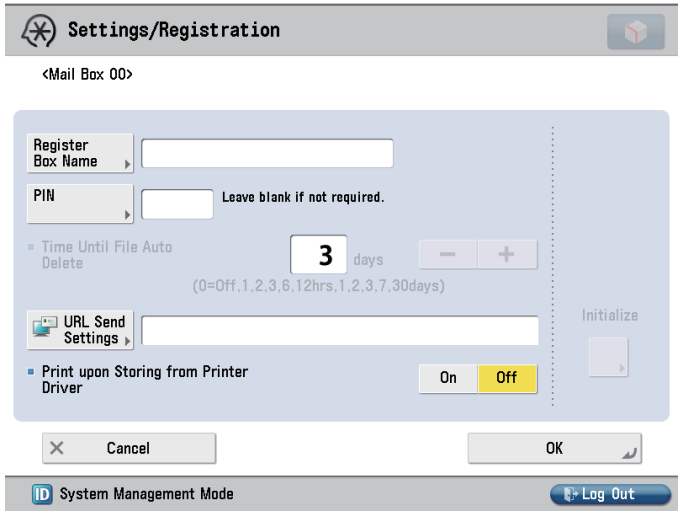
It is function to transmit URL information with E-Mail to be able to refer the image with remote UI. Image preserved in box including fax box instead of transmitting.

The E-mail address where URL is notified can be set by selecting one address or one group address of each box from the address table.

Set the notified mail address by "URL Sending" of "box specification setting."

E-mail automatically notified that the image is stored in the box of the URL sending setting ending is transmitted.

Settings/Registration > Function Settings > Store/Access Files > Mail Box Settings > Set/Register Mail Boxes



F-2-3

Setting for communicate SSL

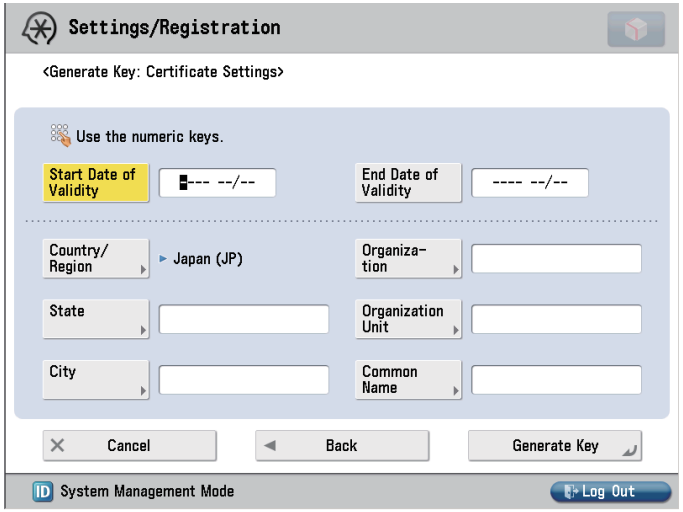
To communicate SSL, this machine can register the key pair and the certificate. The key pair and the server authentication book self-signed by default have registered as DefaultKey.
The default key used by the following settings can be changed.

- Remote UI
- IPP Print Settings
- Device Information Delivery Settings
- Dept. ID Management Password Confirmation
- E-Mail/I-Fax: Authent./ Encryption Settings

Settings/Registration > Preferences > Network > TCP/IP Settings > SSL Settings

F-2-4

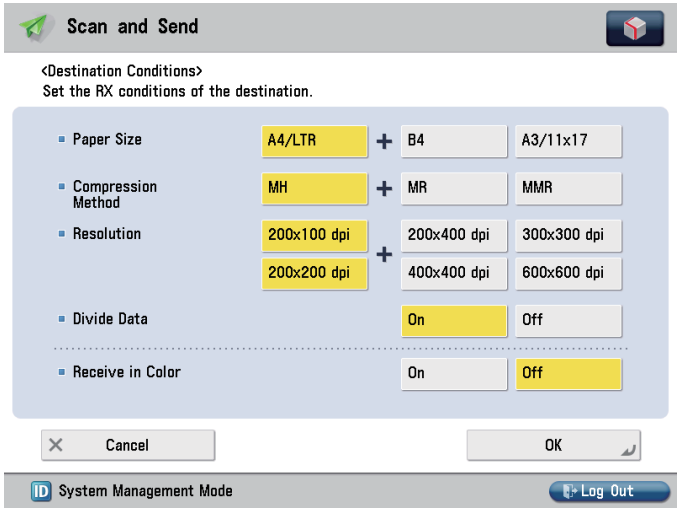
In the case of IPPS print from Windows Vista, the Common Name should be the IP address of the host machine when generating SSL key.
Settings/Registration > Management Settings > Device Management > Certificate Settings > Generate key > Generate SSL Key



F-2-5

i-Fax Divided Data Transmission

The mail division mechanism (message/partial) as prescribed by RFC2045 is used to divide mail data for transmission.
If the data of a mail is in excess of the size specified for 'transmission data size upper limit' in user mode, the mail will be transmitted using the specified upper limit.
The order of pages in page-based divided transmission may not be as expected on the receiving side.
A job may make its way between jobs.
In the event of a log mismatch between transmitting and receiving sides, or if the size of the image data per page is in excess of the limit, a solution is offered for the resulting error.
However, if the communication is by way of a mail server, there will normally be an increase in the mail data size when the server affixes a Received header.
To accommodate the fact, the division is initiated with a safety margin of about 4K bytes at time of transmission.



F-2-6

The transmission is by way of a server, or is a server-less transmission in which IFAX-SZL of service mode is set to '0'.

- the target of transmission is set to 'data size division: ON' in the address book.
- the data size of the transmission mail is in excess of the 'transmission data size upper limit' set in user mode.
- if the transmission is by dividing the data, there will be a serial number affixed to the head of Subject of each mail (e.g., [1/5], [2/5],..., [5/5]).
- mail data will carry 'message/partial' as 'MIME Content Type' to indicate the use of divided transmission.

-there will be indications of 'number', 'total', and 'division ID'.

- 'division ID' is a character string made up of the following: date of transmission, time of transmission, 0000 (fixed character string), transmission file number, host name.
- all units of the same mail will have the same ID'.

ex:
Content-Type: message/partial; number=1; total=3;
id="20041110104508.0000.CanonTxNo.0105@e320g-43-1.ccm.canon.co.jp"

E-Mail Divided Data Transmission

If a value other than '0' is set as the 'transmission data size upper limit' in service mode, the size of data sent for a single mail will be no more than the specified limit.
If the transmission data size is in excess of the setting, the following will be true for models other than the iR C3170/C2570:

- if 'data size division' is enabled (ON) for the target in the address book, data size division transmission will be executed; if disabled (OFF), on the other hand, the transmission will be by page-based division.
- when division transmission is executed, there will be a serial number affixed to the head of Subject of each mail (e.g., [1/5], [2/5], ..., [5/5]).
- if multiple mails have been transmitted to individual addresses by divided transmission, the transmission results report and the communications management reports will treat them as a single mail.

(1)Data Size Division Transmission

If the size of the mail is in excess of the 'transmission data size upper limit' set in user mode as prescribed for mail division (message/partial) in RFC2045 and RFC2046, the mail will be transmitted using the upper limit.
If the mailer supports RFC, this function enables merging of received mails.
However, if the communication is by way of a mail server, there will normally be an increase in the mail data size when the server affixes a Received header.
To accommodate the fact, the division is initiated with a safety margin of about 4K bytes at time of transmission.

- mail data will carry 'message/partial' as 'MIME Content Type' to indicate the use of divided transmission.
- there will be indications of 'number', 'total', and 'division ID'.
- 'division ID' is a character string made up of the following: date of transmission, time of transmission, 0000 (fixed character string), transmission file number, host name.
- all units of the same mail will have the same ID'.

ex:
Content-Type: message/partial; number=1; total=3;
id="20041110104508.0000.CanonTxNo.0105@e320g-43-1.ccm.canon.co.jp"

(2)Page-Based Division Transmission

The attached image data is divided with reference to page breaks within the 'transmission data size upper limit' specified in user mode, transmitting it by dividing it into multiple mails.
If Multi Page TIFF or PDF is selected, multiple pages up to the specified upper limit will be transmitted as a single Multi Page TIFF or PDF file.
If transmission is by collecting multiple files inside a Box, the transmission will be as a single job, increasing the possibility of its being divided.
If the size of the attached image data for a single page is in excess of the setting, the transmission will be handled as an error, ending the ongoing transmission.

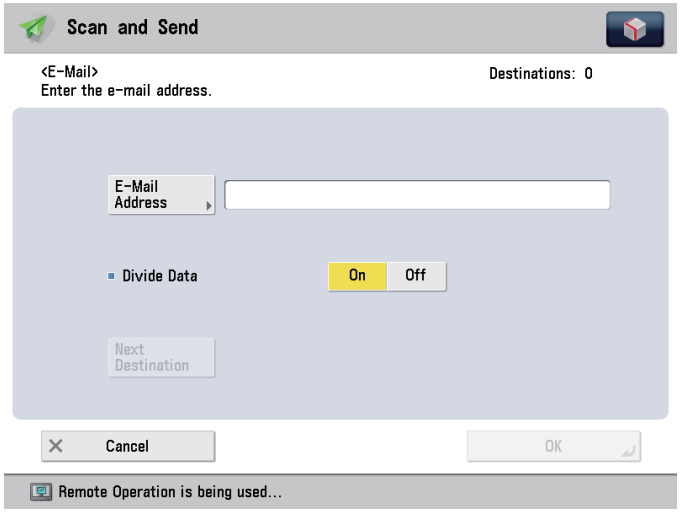
If the setting is '0', no division of the data will occur, and all data will be transmitted as a single mail regardless of its size.
Default maximum data size is 3MByte.

Example of Divided Transmission for Multiple Files
When using PDF transmission of the following 3 files:

- file A, consisting of 5 pages
- file B, consisting of 6 pages
- file C, consisting of 2 pages

In keeping with the setting for divided transmission, the mail will be divided as follows, converted into PDF files, and transmitted as 3 mails:

- mail 1, consisting of 1 through 5 pages of file A + 1st page of file B (as PDF file)
- mail 2, consisting of 2 through 6 pages of file B + 1st page of file C (as PDF file)
- mail 3, consisting of 2 pages of file C (as PDF file)



F-2-7

E-Mail Divided Data Reception

The following takes place in response to an incoming divided mail:
The divided mail (message/partial) will be temporarily stored in 'divided data reception box' inside the System Box; once all divisions are available, merging is initiated.
As in the case of a normal mail, the result of merging will be printed, transferred, or stored in the System Box.
If a length of time is specified for 'divided reception time-out', and such a time passes, as many divided mails as possible are merged and the result will be printed as soon as data is enough to make up a single page.
If the data is not enough to make up a single page, such information as on To, From, and Subject provided as part of the main Header will be printed.
A mail for which a time-out condition has occurred and mail units with the same ID will be removed, ending the job as an error (code #848).

The mails that are stored in 'division data reception box' may be manually removed.
If a check mark is put for 'print at time of deletion', an attempt for merging will be made, and printing occurs if possible. This operation will be identified by error code #99.

USB Deactivation

This feature sets permissions for using the USB device/host interface.

USB Device On/Off

When USB is connected with iR and PC is printed, it uses it with the USB device.
iR rectangular connector on A side is done.
This parameter is located under the System Settings. With this parameter, the USB device interface can be turned on or off (the factory preset is on).
On: normal operation
Off: both raw mode and USB's 1284.4 mode operations stop
The plug-and-play function is also disabled because the device does not respond to Device-ID requests.
Changes to the on/off setting take effect the next time the device is restarted.

USB Host On/Off

When IC card reader etc. are connected with iR, it uses it with the USB host.
It connects it with the flat type connector of iR.
This parameter is located under the System Settings. With this parameter, the USB device interface can be turned on or off (the factory preset is on).
On: normal operation
Off: operation stops
The plug-and-play function is also disabled because the device does not respond to Device-ID requests.
Changes to the on/off setting take effect the next time the device is restarted.
Note that this parameter is used to disable all devices that can be connected to the USB host, including IC cards and other authorization tokens, keyboards, and USB keys.

Location of Parameters

Under Additional Functions,
Settings Registration > Preferences > External Interface > USB Settings
Use USB device
Use USB host

These parameters cannot be accessed from remote user interfaces.

Operation when updating firmware using USB memory

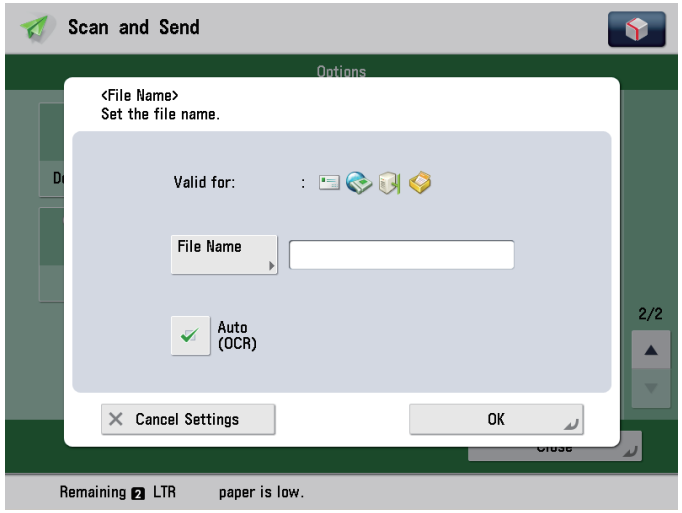
The USB host is always enabled when update firmware is selected in Service Mode.
After the update is completed and the device restarted, the state of the USB host is again dependent on the value of the System Settings parameter.

Document Orientation Auto Detection

Document orientation auto detection is available when PDF (OCR) is selected. When a PDF (OCR) file is sent to an e-mail address or a file server, the result of OCR processing is used to identify the orientation of the original (with reference to the orientation of characters), and the file is sent after automatically rotating the image, if necessary, so that the user need not concern himself with the orientation of the document for transmission. It is important to bear in mind, however, that any of the following types of documents may be transmitted in the wrong orientation:

- whose characters are at an angle (+/-3 deg or more)
- which contains white characters against black background, uncommon font, or handwritten characters
- whose text is not at 300 dpi and is not between 10 and 20 pt
- whose characters per page are appreciably limited in number (ideally, there must be 50 characters or more)

NOTE
A document may not fall under the foregoing types, but may still be transmitted in the wrong orientation. If wrong orientation is too frequent, disable the function.



F-2-8

Document Name OCR

The file name OCR function is available when PDF (OCR) is selected. When a PDF (OCR) file is sent to an e-mail address or a file server, a file name will be assigned with reference to the result of OCR processing. When transmission is executed with the File Name OCR button checked (part of transmission settings), as many characters as specified in Additional Functions will be collected from the head of the text block on the first page and used as the name of the file. A maximum of 24 characters may be used, and it may be combined with a name that has separately been assigned. All characters that follow the initial 24 will be cut out of the name.

NOTE
If the setting Additional Functions>Common Settings>Langage Switch is set to [ON] , 2-byte characters will not be collected for the file name. If a name must include a 2-byte character, be sure to set the setting to [OFF].

BOX back up

Purpose:
In order to prevent from missing documents in MAIL BOX permanently because of the hard disk failure inside the iR device, the following function was added: Documents in Mail Box are backed up or restored to the file server connected on the network.

System configurations

The following items are necessary.
- iR device
- SMB server connected on the network

The following types are supported as the SMB server.
Windows system
WIN2K/XP/2003
UNIX system
OS: Linux/RedHat
Server software: samba2.2.8/3.0
You can set the access right to the backup data stored in the server.
In this case, the appropriate user account is necessary.

Data to be backed up

The following data are backed up.
- User Inboxes specification settings(Register Inbox Name, Password, Time until Document Auto Erase, Print upon storing from the printer driver)
- Image data of User Inboxes documents
- Setting information of User Inboxes documents
- Confidential Fax Inbox specification settings(Register Inbox Name, Password)
- Image data of Confidential Fax Inbox, Memory RX Inbox and Register Form for Form Composition Image Data

Important
Mail Box documents backed up using this function can be used in the same model only. If the backup documents are used in the different model, we will not guarantee the operations.

Data to be initialized at the restoration

After folders and Mail Box documents in the iR device are all erased, the restoration is executed.
Data to be initialized at the restoration are as follows.
- Information in Confidential Fax Inboxes and Memory RX Inbox
- Mail Box documents created after the previous backup operation
- Reception number (Target jobs: PDL print, copy, Mail Box Scan, Mail Box Print)
- Mail Box documents backed up using this function can be used in the same model only. If the backup documents are used in the different model, we will not guarantee the operations.

Backup destination settings

Specify "Host IP Address", "User Name", "Password" and "File Path" of the SMB server in which Mail Box documents are backed up. After clicking "Add. Func." of the remote UI, select "Custom Settings" from the menu and click "Backup Destination Settings".
- Host IP Address

Enter the server address which provides the SMB service.
Specify the setting value in the format of \\Server name\Name of the shared folder.
If the correct value is not set, the backup operation cannot be proceeded.
Note: Set "User limit" of the shared folder in the server to "2" or more value or "Maximum allowed".
When you set "User limit" to "1", the restoration is not executed correctly.
- User Name

Enter the user name of the SMB server.
If you do not enter the account name which exists on the server, the backup operation cannot be proceeded.
- Password

Enter the password which corresponds to the server account name above.
If you do not enter the password which corresponds to the server account name above, the backup operation cannot be proceeded.
- File Path

Enter the file path which the data are backed up and stored.
If you do not enter the directory which exists on the server, the backup operation cannot be proceeded.

Note:
Specify the setting value in the format of
“\\Server name\Name of the shared folder \Sub folder”
- Case1
Host IP Address: \\Server name\Shared folder
Folder Path : \Sub folder
-> This mention is right.
- Case2
Host IP Address: \\Server name
Folder Path: \Shared folder\Sub folder
-> transmit a data normally
Host IP Address does not have "Name of Shared folder".
A file transmission of a message module moves character string of "Name of Shared folder "of Folder Path in" Host IP Address "and you get over for a format of Case1 and call API.
- Case3
Host IP Address: \\Server name\Shared folder\Sub folder
Folder Path: None
-> Transmission error (#751)
Cannot judge it where is "Shared folder".
Dispatch input character string to API of the SMB transmission of a message.
Transmission error

Execution of the backup

After clicking "Add. Func." of the remote UI, select "Custom Settings" from the menu and click "Backup". When you press the "Execute" button, the backup operation will be executed. However, the error occurs when either of the following folders already exists on the file path: Mail Box folder which is previously backed up the data or BOX.tmp folder which is the folder for operations. Therefore, before executing the backup operation, you need to delete or rename the folders described above.

Data of the backup destination

In order to prevent from the failure during the backup operation, such as the device's power shutdown, start the backup operation by generating the following path on the SMB server:

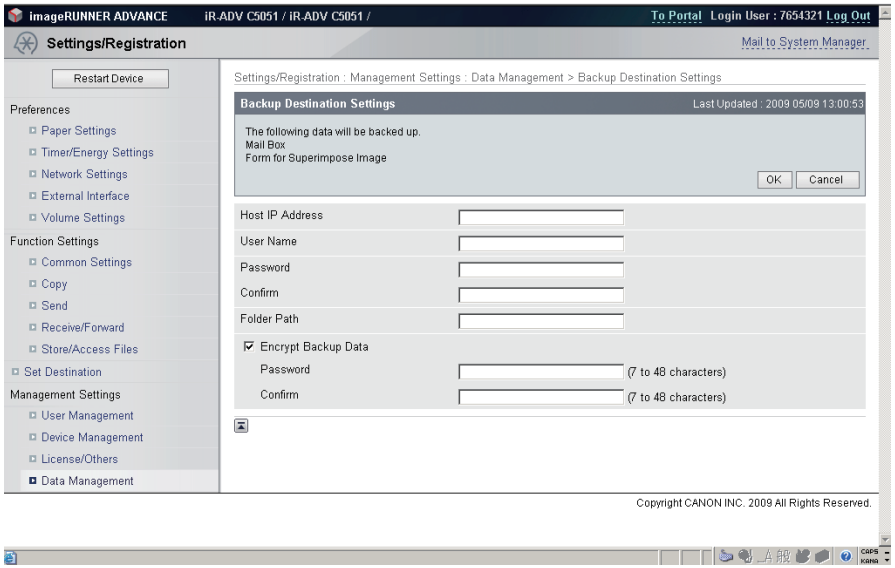
\\<Host IP Address>\<File Path>\BOX.tmp\
This path will be renamed as follows when the backup operation is completed:
\\<Host IP Address>\<File Path>\BOX\

Execution of the restoration

After clicking "Add. Func." of the remote UI, select "Custom Settings" from the menu and click "Restore".
When you press the "Execute" button, the restoration which the backup data are read from the server set in "Backup Destination Settings" is executed.
In order to guarantee that the other functions are not executed during the restoration, the actual restoration is not executed until the device is started next time.
After all the Mail Box documents are restored, the auto-reboot is executed and the device is started normally. Then, the process will be the same as the normal operations.

Security

There is no encryption support for the communication route between the machine and the SMB server. In order to prevent information leaks of the Box documents, those data must be encrypted prior to transmission. Following procedure enables encryption/decryption of backup data using the encryption module in the iR machine.
Setup:
In RUI, select initial setup / registration > specification setup > specification setup > specify the destination to backup, and then select 'Encrypt the backup data'. Enter the password.
The password which was set on the RUI is cleared by deactivating 'Encrypt Backup Data'.
The same password is required for decryption of the encrypted backup data. The data is not restored by different password.



F-2-9

Activation of SSL for RUI

Unless SSL setting is activated for RUI, ID and password are sent as uncoded text.
SSL setting must be activated in order to ensure security.
From the control panel, select 'Settings Registration > Management Settings > License /Other > Remote UI > Use SSL, and activate 'Use SSL'.

Transmission File Format

Make the following selections to bring up a list of possible combination options: Send>File Format.

'Compact' and 'OCR' (text searchable) may be set separately.

In other words, an OCR file (text searchable) that is not "compact" may be created.

File Format		BW	Color	Greyscale	Divide into pages
TIFF/PDF Auto Select	TIFF	OK	None	None	No
	PDF	None	OK	OK	
TIFF/XPS Auto Select	TIFF	OK	None	None	No
	XPS	None	OK	OK	
TIFF/JPEG Auto Select	TIFF	OK	None	None	Yes
	JPEG	None	OK	OK	
PDF		None	OK	OK	Yes/No
XPS		None	OK	OK	Yes/No
JPEG		None	OK	OK	No
TIFF		OK	None	None	Yes/No

Selectable : OK
Not selectable : None
*1 Trace & Smooth works in conjunction with Compact when selected.

T-2-1

File Format		Trace & Smooth	Compact	OCR(Text Searchable)	Encrypt	Add Digital Signature
TIFF/PDF Auto Select	TIFF	None	None	None	None	None
	PDF					
TIFF/XPS Auto Select	TIFF	None	None	None	None	None
	XPS					
TIFF/JPEG Auto Select	TIFF	None	None	None	None	None
	JPEG					
PDF		OK	OK*1	OK	OK	OK
XPS		None	OK	OK	None	OK
JPEG		None	None	None	None	None
TIFF		None	None	None	None	None

Selectable : OK
Not selectable : None
*1 Trace & Smooth works in conjunction with Compact when selected.

T-2-2

Increased Support of File in a Box

Compact Transmission

If the reading resolution of the file to transmit is 300 dpi or higher, it may be converted to 300 dpi for compact transmission. Such conversion or compact transmission will not take place if the resolution is less than 300 dpi (i.e., the transmission will be in non-compression PDF).

Support of Compact/OCR (text searchable) Transmission

PDF (OCR) transmission of files in a Box is supported. Regardless of the reading resolution of the files to transmit, the resolution will be converted to 300 dpi, processed by OCR, and transmitted.

Support of Trace & Smooth

PDF transmission of files after processing by Trace & Smooth is supported. The files will be converted to 300 dpi (high compression) for transmission. No conversion or compact transmission will take place if the resolution of the file is less than 300 dpi. (The transmission will be in non-compression PDF.)

Limit of Reception Length of Extra Long Original

In previous models, reception length limit (except the case that resolution is as high as 600 x 600) was 1 m.
Only in the case the resolution is FINE (204 x 196) or less, reception length limit can be changed up to 2 m from the service switch SPECIALB SW29 B2 setting.

Resolution	Length limit	
	B2=0	B2=1
204*98=STD	1m	2m
200*100	1m	2m
204*196=FINE	1m	2m
200*200	1m	2m
204*391=SFINE	1m	1m
200*400	1m	1m
300*300	1m	1m
400*400	1m	1m
408*391=UFINE	1m	1m
600*600	1m	1m

T-2-3

Restriction of Paper Type Information Delivery

Add the paper type information delivery at the time of the device information delivery settings.

Paper Type Support:

The paper type support is the mechanism that enables to print various types of paper distinctively besides the existing paper types (plain paper, heavy paper, etc).
For instance, the grammage (paper weight) and the surface property of a paper, generally called as plain paper, vary by makers and product names.
If the paper type differs although sharing the same printing property, the appearance of the outputs will be differed.
In order to obtain the optimal output, it becomes possible to register the paper type information that enables to adjust printing property for each paper type and print with the appropriate printing property.

Restriction of Paper Type Information Delivery:

The following 2 types of information delivery are selectable at the time of the device information delivery settings.

- User setting paper
- Paper database

Permission/prohibition of the paper database delivery can be set in the following service mode.

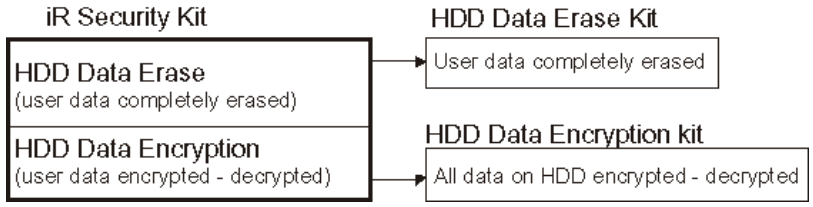
In the service mode level 2,
COPIER>OPTION>FNC-SW>PT3-INEX
0: Not permit
1: Permit

In case of prohibition:

- The paper database is not displayed in item selection when executing manual delivery, automatic delivery, and data recovery.
- When executing the delivery from a machine with which handling of the paper database is permitted to a machine with which the handling is not permitted, the operation is terminated as #887 error at the reception side.

HDD Data Erase Kit

The earlier iR Security Kit was a function that enabled the complete erasure of all user data, as well as user data encryption and decryption. As the data encryption is performed by software, when using functions that temporarily store data on the main unit HDD, such as copy, scan, print and box, performance falls by more than 20% in comparison with when such functions are not being used. Also, the used data erase operation may cause a drop in performance.
The HDD Data Encryption Kit performs encryption and decryption by hardware, without any loss of performance. The HDD Data Encryption Kit allows the user to guard against the leaking of user data due to theft of the hard disk. However, data pertaining to copy, scan, print and box functions will remain on the hard disk after the Data Encryption Kit has been used so, in order to guard against unauthorised viewing by a malicious third party, it was necessary to use the iR Security Kit in addition.
With the HDD Data Erase Kit, copy, scan, print and box data can be automatically erased after use, without using the iR Security Kit, thus preventing unauthorised viewing. Also, use of the HDD Data Erase Kit results in no loss of performance and allows the user to prevent user data from being leaked due to theft of the hard disk. However, with the Data Erase Kit, the data erase operation will result in some loss of performance, as with the iR Security Kit.


iR Security Kit
HDD Data Erase
(user data completely erased)
HDD Data Encryption
(user data encrypted - decrypted)
HDD Data Erase Kit
User data completely erased
HDD Data Encryption kit
All data on HDD encrypted - decrypted
F-2-10

The Data Erase Kit is a function for erasing data after they have been used by the main unit.This has nothing to do with the erasure of user data at lease renewal.To erase user data all at once, including address tables, use the following user mode, as in the past.

Settings/Registration > Management Settings > Data Management > Initialise all Data/ Settings

Types of user data erased

Once the HDD Data Erase Kit is activated, all unnecessary data and deleted data on the hard disk can be completely erased.
The erasure timing and erasure mode can be selected with the HDD Data Erase Kit.

The following data are erased.

- temporary image data generated when a scan is made
- cascade copy/ remote copy transmission and reception data
- residual data after box texts have been deleted
- fax/ i-fax transmission and reception data
- spool data
- temporarily stored print data

HDD Data Erase

HDD Data Erase can be performed in either of the following two ways.

- Turn the host machine's main power supply OFF/ ON.
- HDD Data Erase will be performed automatically after copy, scan, print or box operations.

Turn the host machine's main power supply OFF/ ON

When the HDD Data Erase Kit has been activated, once the host machine's main power supply is turned ON, all data in the HDD are erased. In such cases, the following message will be displayed for a few minutes, after which time the touch panel will be operational.

Remaining data that is not needed is being erased.
Do not need turn off the main power.

HDD Data Erase timing settings

Additional Functions > System Settings > Hard Disk Data Complete Erase Set > Erase Timing > During job or After job
If the user frequently outputs documents with multiple pages, selecting [After job] means that the erasure will be done after the job is finished, so the erasure time is not included in the processing time.
When outputting multiple jobs in sequence, selecting [During job] means that the time waiting between jobs is shortened.

HDD Data Erase mode settings

Additional Functions > System Settings > Hard Disk Data Complete Erase Set > Erase Mode >
0 (Null) Data 1 time

Random data 1 time
Random data 3 times

The more the number of write operations increases, the more loss of performance there will be during jobs.

Related service modes

COPIER>OPTION>USER		
Specification selection related to user mode		
Sub item	Description	level.
HDCR-DSP	Used to turn off display of user mode hard disk clear mode and switch clear operations. 0: Don't display and don't clear 1: Clear once with zeroes 2: Clear once with random data 3: Clear 3 times with random data (mode displayed for settings 1 to 3) MEMO: function for HDD initialization This is the function to clear the data on HDD completely by overwriting the 0 (null) data and random data to file data area at the moment of deleting files logically (timing for deleting the administrative information data) in HDD.	2
HDCR-DSW	Selection of whether to display 'all HDD data clear ON/OFF' item in user mode To select whether to display the 'all HDD data clear ON/OFF' item in the user mode. This mode takes effect only when the all HDD data clear function (licensed) is activated. When the user asks for the item to be provided. 0: The item is not displayed.[default] 1: The item is displayed.	1
CLR-TIM	All processing data erase timing This selects the timing at which all the data is to be erased in the security kit. When erasing all the data, the job processing performance may deteriorate depending on the data erased. The reason for this is as follows: since the already processed page data is erased in parallel while jobs are being processed, an extra burden is placed on the CPU and hard disk access process. The job processing capability can be improved by delaying this process until after the job has been completed. Settings 0: The data is erased while the job is being processed. 1: The data is erased after the job has been completed. [Factory setting/value after clearing RAM: 0]	2

T-2-4

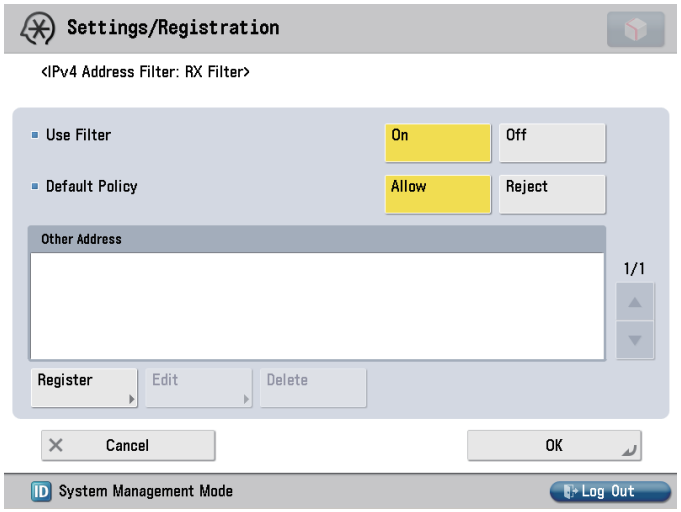
IP Address Range Settings

IP Address Range Settings is a function used to either enable or disable (reject) the reception of packets from a specific IP address.

Settings/Registration>Preferences>Network>Firewall Settings>IPv4 or IPv6 Address Filter>RX Filter

By specifying a reception/printing range, limits may be imposed on printing from a PC.

By specifying a setup/reference range, limits may be imposed on the PC given access to MFP machine settings (e.g., editing thereof).



F-2-11

IP addresses may be set one by one or as a range of addresses.

For both, as many as 8 addresses may be selected.

F-2-12

Where reception/printing is concerned, the following protocols and applications apply:

LPD, RAW, SMB, FTP, HTTP (IPP), PDF, SMTP

Where setup/reference is concerned, the following protocols apply:

SNMP, HTTP (RUI)

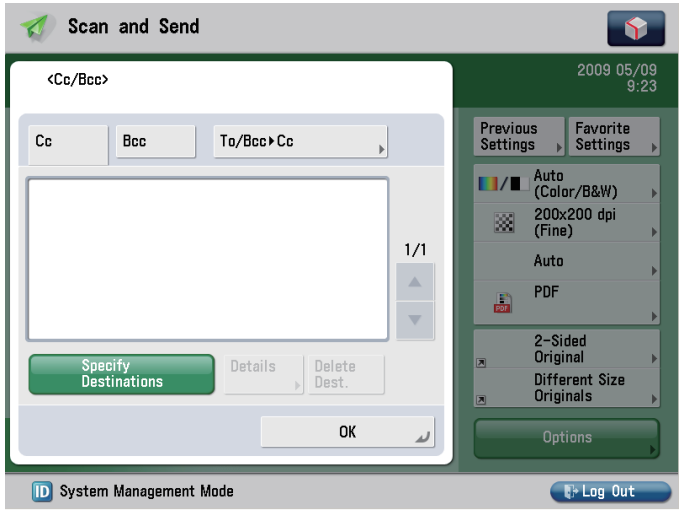
Protocol-Related Setup

Protocols and applications make use of specific ports. If left "open," an unused protocol can prove to be a security risk. In this regard, it is made possible to enable/disable (on/off) the ports individually.

Protocols and Applications Concerned

	Additional Functions
LPD	Settings/Registration>Preferences>Network>TCP/IP Settings>LPD Print Settings
RAW	Settings/Registration>Preferences>Network>TCP/IP Settings>RAW Print Setting
SMB	Settings/Registration>Preferences>Network>SMB Server Settings>Use SMB Server
HTTP	Settings/Registration>Preferences>Network>TCP/IP Settings>Use HTTP
IPP	Settings/Registration>Preferences>Network>TCP/IP Settings>IPP Print Setting
FTP	Settings/Registration>Preferences>Network>TCP/IP Settings>FTP Print Setting
SNMP	Settings/Registration>Preferences>Network>SNMP Settings>Use SNMPv1 and Use SNMPv3

T-2-5



F-2-13

RUI Log-in Procedure

In 'Settings/Registration', if 'System Manager ID' and 'System Password' are selected under Management Settings>User Management, a press on the User Mode button of the RUI will bring up a screen that asks for the appropriate ID and password.

Previously, as many log-in attempts as needed might be made (i.e., failing to type in the correct ID/password). With the current version, making the following service mode setting will cause port 8000 to close for 3 min if the log-in operation fails 3 times within 3 min, during which time log-in operation will remain impossible:

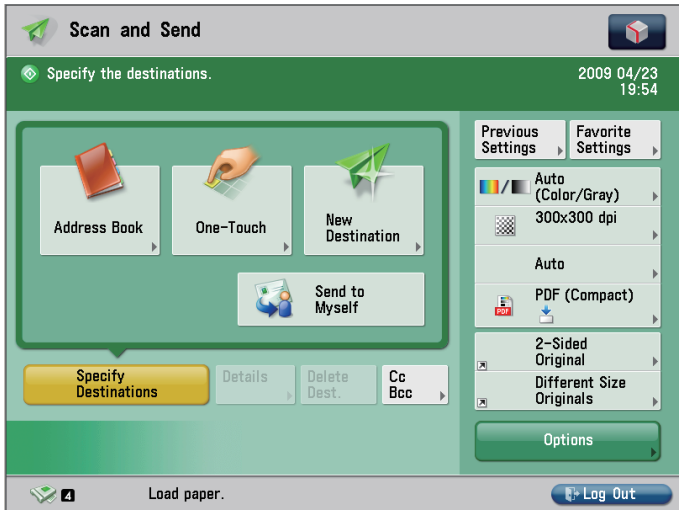
COPIER>OPTION>USER>RUI-RJT

cc/bcc Settings

In addition to the address used in the e-mail, transmission may be controlled by means of cc (carbon copy) and bcc (blind carbon copy).
This applies to e-mail addresses only, and is available when 'Send Transmission Function' is enabled.
In the case of 'cc' and 'bcc' alone, as many as 64 addresses may be specified. Including 'To', a total of 256 addresses may be used.

Send to Myself

For 'New Address' under 'Send', a press on 'Send to Myself' will enable the use of an address collected from user information (log-in by SSOH).



F-2-14

WebDAV Support

So that a folder may be accessed through SMB or an FTP server may be accessed by an FTP client, a file may be placed where access is possible over the Internet, thanks to the WebDAV function (WWW distributed authoring and versioning).

The WebDAV file here must have been created as part of IIS (Internet information services) and its name must have been solved through Windows 2000 Server or Windows 2003 Server. Access by a client PC was possible also with previous versions, and the new version additionally permits transfer of a file from the iR machine to a WebDAV folder.
The WebDAV transmission function is used to send any of the following types of input images to a WebDAV server on the Internet or intranet using the WebDAV protocol.

Types of Images

images read by a scanner
- images transferred by a fax machine (or by a fax receiving mechanism)
- Images sent by a user Box/system Box

The input images will be saved in the selected directory of the appropriate server using a user-defined file name or date of transmission.
If WebDAV needs to be set for verification purposes, refer to the appropriate documentation prepared for field servicing work.

Points to Note About Using WebDAV

-If the load imposed on the network is appreciable and, therefore, retry communications are frequent, increase the value of 'Retry Times' under the following: Settings/Registration>Function Settings>Send>Common Settings.
- If data transmission is in an Apache environment, try enabling (on) ”Use Divided Chunk Send for WebDAV TX 'ON' with WebDAV Sending of Settings/Registration>Function Settings>Send>Common Settings.
- Where transmission to a WebDAV server outside the LAN is involved, set 'Proxy Settings' of Settings/Registration>System Settings>Network Settings>TCP/IP Settings.
- To find out whether WebDAV has been implemented, check the version by making the following selections (if absent, '--.--' will appear): Service Mode>Copier>Display>Version>WebDAV.
- To disable the use of WebDAV, set '1' to the following: Service Mode Level 2>Copier>Optional>Body>WebBV-SW.

If disabled, the following will be true:
- There will no longer be WebDAV choice under Settings/Registration>Set Destination>Register Destination>Type.
- The following will be grayed out: Settings/Registration>Function Settings>Send>Common Settings>Use Divided Chunk Send for WebDAV TX.

Important

This unit cannot transmit to a WebDAV server on Wndows Vista.

Documents sent from Windows Vista to a WebDAV server on a network can be viewed.

IPv6 setting display list

Each function display for IPv6 is shown below.

Application		Set display
DNS	Domain Name System	Settings Registration > Preferences > Network > TCP/IP Settings > DNS Settings
DDNS	Dynamic DNS	Settings Registration > Preferences > Network > TCP/IP Settings > DNS Settings >DNS Dynamic Update Settings
DHCPv6	Dynamic Host Configuration Protocol version 6	Settings Registration > Preferences > Network > TCP/IP Settings > IPv6 Settings > Use DHCPv6
SNTP	Simple Network Time Protocol	Settings Registration > Preferences > Network > TCP/IP Settings > SNTP Settings
Ping	Packet INternet Groper	Settings Registration > Preferences > Network > TCP/IP Settings > IPv6 Settings > PING Command
IP block	Internet Protocol	Settings Registration > Preferences > Network > Firewall Settings > IPv6 Address Filter > RX Filter
RAW	Read After Write	Settings Registration > Preferences > Network > TCP/IP Settings > RAW Print Settings
LPD	Line PRinter daemon protocol	Settings Registration > Preferences > Network > TCP/IP Settings > LPD Print Settings
FTP Print	File Transfer Protocol	Settings Registration > Preferences > Network > TCP/IP Settings > FTP Print Settings
HTTP Server	HyperText Transfer Protocol	Settings Registration > Preferences > Network > TCP/IP Settings > Use HTTP
IPP	Internet Printing Protocol	Settings Registration > Preferences > Network > TCP/IP Settings > IPP Print Settings
RUI	Remot user interface	Settings Registration > Management Settings > License/ Other > Remote UI
SNMPv1/v3	Simple Network Management Protocol	Settings Registration > Preferences > Network > SNMP Settings
Email/FAX	Electronic Mail/ Facsimile	Settings Registration > Function Settings > Send > E-mail/i-FAX
WebDAV	WWW Distributed Authoring andVersioning	Settings Registration > Set Destination > Register Destinations > Register New Dest. > File > Protocol > WebDAV
SLP Server	Service Location Protocol	Settings Registration > Preferences > Network > TCP/IP Settings > Multicast Discovery Settings
IPSec/IKE	IP security Internet Key Exchange	Settings Registration > Preferences > Network > TCP/IP Settings > IP Sec Settings > Use IP Sec ON > Register > IKE Settings

T-2-6

Each to set IPv6, the use of IPv6 is turned on on the following screens.

Settings Registration > Preferences > Network > TCP/IP Settings > IPv6 Settings > Use IPv6 > ON

To stop using IPv4, turn IPv4 OFF in the window shown below.

Settings Registration > Preferences > Network > TCP/IP Settings > IPv4 Settings > Use IPv4 > OFF

Encrypted PDF

When sending a PDF file to an e-mail address or to a file server, the file may be encrypted and a password may be assigned to it for security. Once a password is assigned, the recipient must type in the correct password to open or print/edit the file. A PDF file may be turned into an encryption PDF file by clicking a button in the course of making settings for transmission. For particulars of settings, see the specifications given previously.

Caution:

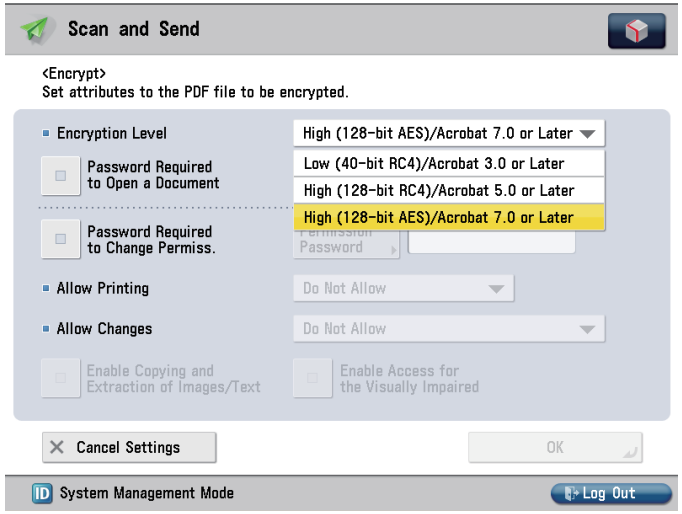
The target of transmission of an encryption PDF file must be an e-mail address or a file server. For instance, the target must not be a group of addresses that include an i-fax or Box address.

Notes:

A license key may be registered by making the following selections: Settings/ Registration>Management Settings>License/Other>License Register. To prevent cracking of a license key, the use of a remote user interface is not considered.

Important

When 'High (128-bit AES)/ Acrobat 7.0 or later' has been selected as the encryption level, Acrobat/ Acrobat Reader 7.0 or later will be required.


Scan and Send
<Encrypt>
Set attributes to the PDF file to be encrypted.
Encryption Level
High (128-bit AES)/Acrobat 7.0 or Later
Low (40-bit RC4)/Acrobat 3.0 or Later
High (128-bit RC4)/Acrobat 5.0 or Later
High (128-bit AES)/Acrobat 7.0 or Later
Password Required to Open a Document
Password Required to Change Permiss.
Password
Allow Printing
Do Not Allow
Allow Changes
Do Not Allow
Enable Copying and Extraction of Images/Text
Enable Access for the Visually Impaired
Cancel Settings
OK
System Management Mode
Log Out

F-2-15

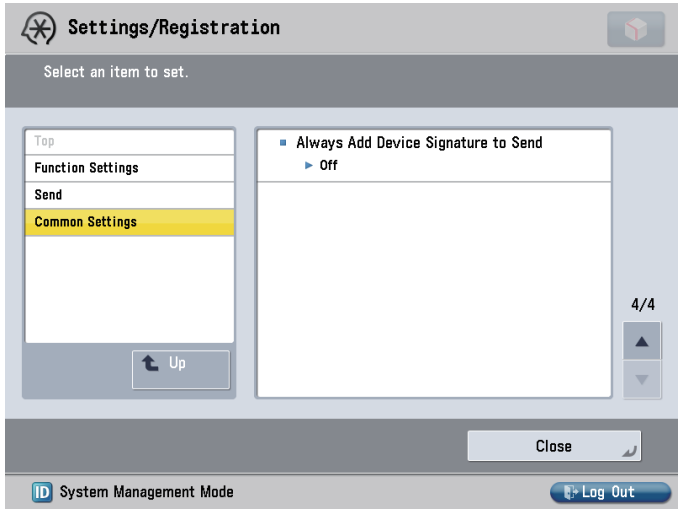
Digital Signature PDF

Digital signature PDF may be any of the following 2 types:

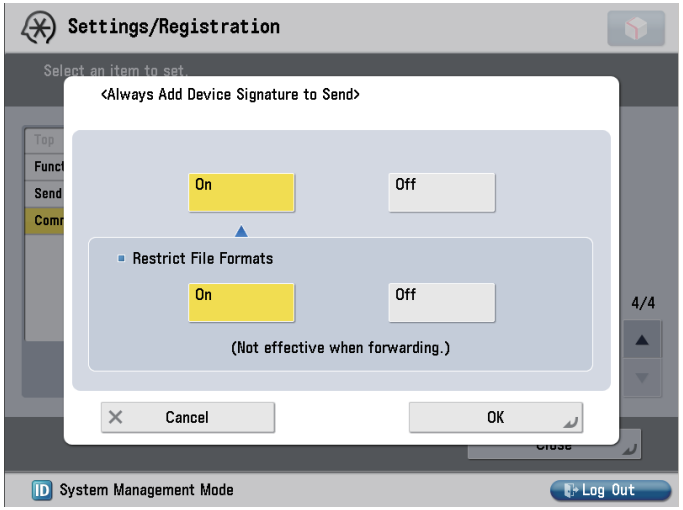
Device Signature PDF	The name of the MFP machine and machine information are encoded and imbedded to the scanned image so that, when opened in Acrobat, the information will appear on the signature tab. The input of the signature is by means of a machine certificate and secret key.
User Signature PDF (SSOH authentication)	For the MFP machine in use based on SSOH, the appropriate user certificate associated with the appropriate personal ID (obtained through the RUI) is recorded. The appropriate user information is encoded and embedded in the scanned image so that it may appear on the signature tab when opened in Acrobat. This will be used to prevent unauthorized editing of data or impersonation.

T-2-7

'Prohibit transmission of non-PDF files' function when device signature is attached to PDF
In units with the licence option Device Signature PDF installed, when transmission is performed with the SEND function, device signatures can be attached in order to enable confirmation of which unit the PDF file came from.
With the following settings, usage conditions are restricted.
- Always Add Device Signature to Send
- Restrict File Format
Setting procedures for [Always Add Device Signature to Send] and [Restrict File Format]
Settings/Registration > Function Settings > Send > Common Settings > Always Add Device Signature to Send

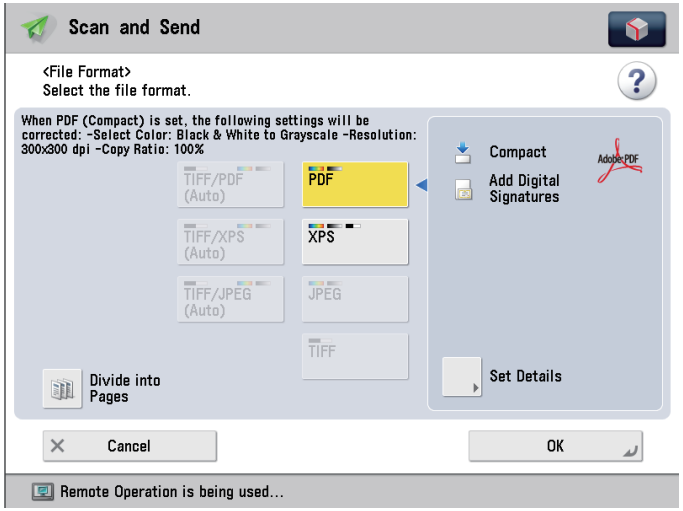


F-2-16



F-2-17

After setup,
Send > open File Format and select the [Add Digital Signatures] button.


Scan and Send
<File Format>
Select the file format.
When PDF (Compact) is set, the following settings will be corrected: -Select Color: Black & White to Grayscale -Resolution: 300x300 dpi -Copy Ratio: 100%
TIFF/PDF (Auto)
PDF
TIFF/XPS (Auto)
XPS
TIFF/JPEG (Auto)
JPEG
TIFF
Compact
Add Digital Signatures
Adobe PDF
Divide into Pages
Set Details
Cancel
OK
Remote Operation is being used...

F-2-18

Searchable PDF/XPS

A searchable PDF file consists of pages of scanned images that have been put through OCR processing. The test data is extracted, and is laid over the original images in the form of invisible text so that a search may be run for a particular segment of the data. A search in a PDF file requires a PDF browser application (e.g., Adobe Acrobat, Adobe Reader). Or, Windows' search function may be used to look for a string of characters. Here again, the target of transmission must be an e-mail address or a file server. To make use of this function, PDF (OCR) is specified when selecting the file format on the Transmission screen. A PDF file that will be generated in response will consist of the following:

- Imaging Block

With Compact setting: 300 x 300 dpi fixed, Compact
No Compact setting: scanning resolution, JPEG (colour)/ MMR (black and white binary)

- Supported Languages

Japanese, Latin 1, Latin 2, Estonian, Latvian, Lithuanian, Russian (Cyrillic), Greek, Chinese simplified, Chinese traditional, Korean

The character codes recognised with OCR are determined by the language selected in user mode as the display language.
Note, however, that no matter which language is selected, ASCII characters (English) will be recognised by OCR.

- Recognized Fonts

Language	Recognised fonts
Japanese	Mincho, Gothic
Alphabetic	Helvetica, Courier New, Times New Roman
Chinese simplified	SimSun, NSimSun, SimHei, MS UI Gothic
Chinese traditional	MingLiU, PMingLiU, MS UI Gothic
Korean	Batang, Dotum, Gulim, MS UI Gothic
Fonts which have different character shapes from the above may have lower recognition rates.	

T-2-8

Important

Searchable PDF can only be transmitted when email or file servers only are specified as the destinations. If the destinations include fax, Ifax or boxes, PDF cannot be transmitted.

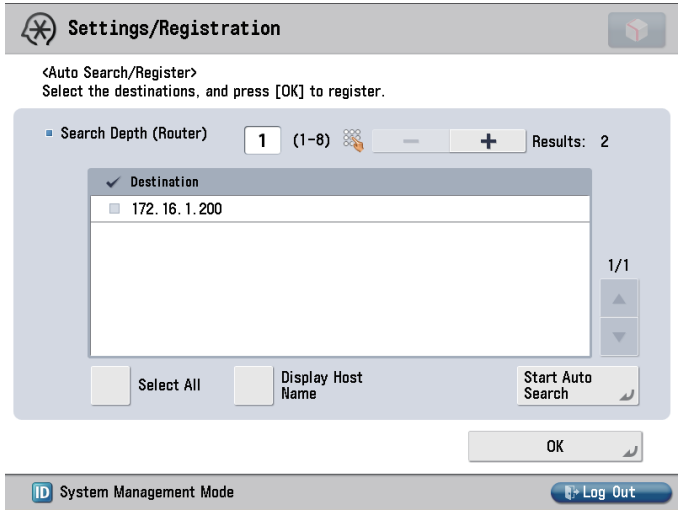
In the case of XPS, the following viewers can be used for searching.

- IE7.0 (Win Vista)
- IE6.0 + .NET Framework 3.0 (WinXP/ Server 2003)
- Dedicated viewer [Microsoft XPS Essential Pack] (Win XP/Server2003) provided by MS

Display Host Name(Device Information Delivery Settings)

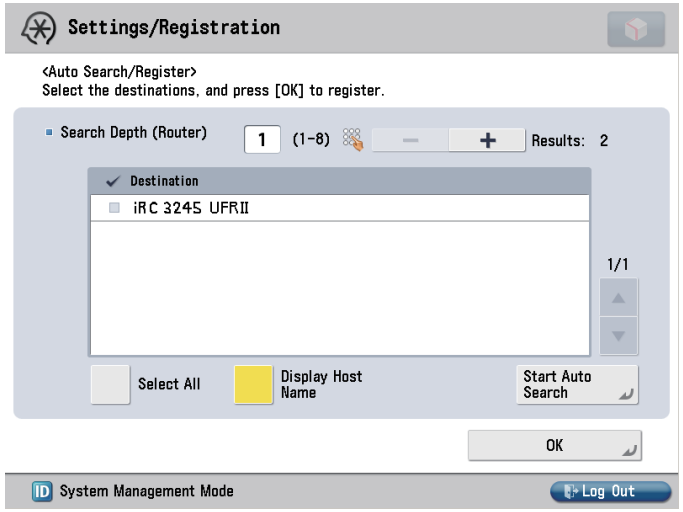
Device information delivery now supports IPv6.
Because the IPv6 addresses are lengthy, it is easy to mistake them when searching for them from lists with Auto Search/ Register. Therefore, in order to make them easier to identify, a Display Host Name button has been added.
After pressing the Display Host Name button, once Auto Search is started, the host names will be displayed.

Display IP Address



F-2-19

Display Host Name



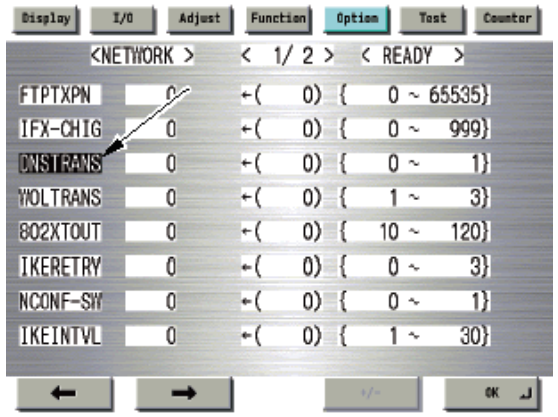
F-2-20

If the unit is enabled for both IPv4 and IPv6, it is necessary to avoid both addresses being displayed. Therefore, there is a new service mode setting that allows one or the other to be displayed.

Even if the settings are for only one of either IPv4 or IPv6 to be used, DNSTRANS is not used.
When the settings are for IPv4 only to be used, the IPv4 address is displayed.
When the settings are for IPv6 only to be used, the IPv6 address is displayed.

COPIER > OPTION > NETWORK		Level
DNSTRANS	If both IPv4 and IPv6 settings exist in Device Information Delivery Settings, Register Destinations, Auto Search/ Register, only one of either IPv4 or IPv6 will be displayed.	1
	Values 0: ipv4 1: ipv6	

T-2-9


Display
I/O
Adjust
Function
Option
Test
Counter
<NETWORK >
< 1/ 2 >
< READY >
FTPTXPN 0 ←(0) { 0 ~ 65535}
IFX-CHIG 0 ←(0) { 0 ~ 999}
DNSTRANS 0 ←(0) { 0 ~ 1}
WOLTRANS 0 ←(0) { 1 ~ 3}
802XTOUT 0 ←(0) { 10 ~ 120}
IKERETRY 0 ←(0) { 0 ~ 3}
NCONF-SW 0 ←(0) { 0 ~ 1}
IKEINTVL 0 ←(0) { 1 ~ 30}
OK

F-2-21

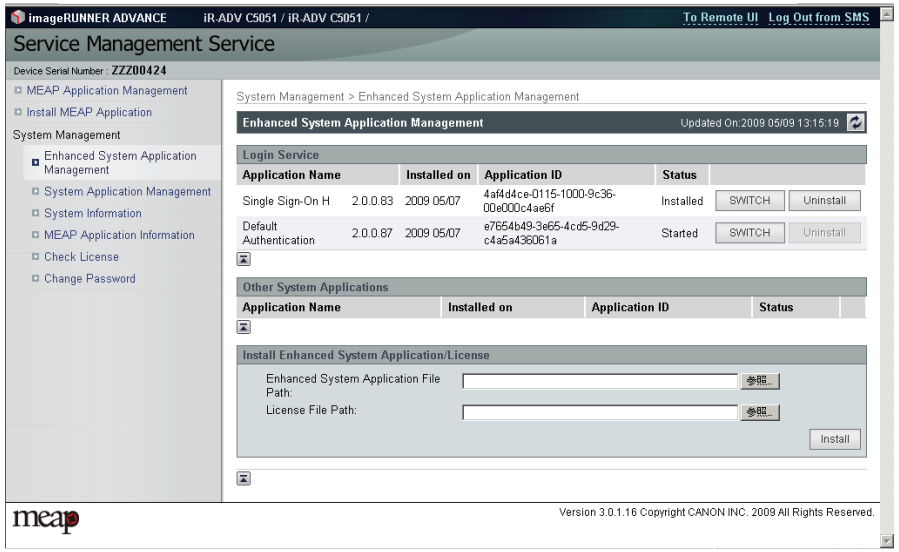
SSOH(Single Sign-On Hybrid)

The login application configuration has changed from the iR3245 series.

- The Simple Device Login (SDL) and earlier Single Sign On (SSO) features have been merged in Security Agent into the Single Sign-On Hybrid (SSOH) feature.
- Pre-installed login applications required for the iR device are now Default Authentication (DA) and SSO-H only.
- The original SSO and Security Agent (SA) are now only provided with the Administrator's CD.
- SDL has been discontinued. (The same login service as SDL can be operated by SSO and SSO-H local device authentication.)

	Earlier models	iR3245 and later
Pre-install	Default Authentication(Default) Simple Device Login Single Sign On	Default Authentication(Default)Single Sign On Hybrid
Administrator's CD	Default Authentication Simple Device LoginSingle Sign On and Security Agent	Default Authentication Single Sign On Hybrid Single Sign On and Security Agent

T-2-10



F-2-22

Authentication mode	Description
Domain authentication	Authenticates users registered with Active Directory.
Local device authentication	Authenticates users registered with device internal DB.Same as the 'Local device authentication' found in SDL and the original SSO.
Domain authentication + local device authentication	This mode enables both domain authentication and local device authentication to be used.Local device authentication is performed by selecting 'This device'.

T-2-11

Important

When attempting to carry out domain authentication (Kerberos authentication), the clocks of the authentication server and the device must be matched. If there is a discrepancy between the clocks when login is performed, there will be an authentication error.

The permissible difference in the initial settings is less than 5 minutes.

In the case of NTLM authentication only, login is possible even if there is a clock discrepancy.

Settings location: Additional Functions > System Settings > Date & Time Settings

In the event that SSOH settings have been changed from a PC, JavaVM will be required in order to display the windows that appear after login. In order to operate the unit in IPv6 mode, Java VM 1.5 or later is required.The Windows 2003 server does not yet support IPv6 login with, so if the unit is in IPv6 mode, login will not be possible.

In the case that domain authentication is used, it is required to reset the setting of user logon name and password on Active directory when a user ID or password is changed.

As for the user ID and password that have been registered before the start of operation of Active Directory, it is also required to reset the password.

If an incorrect user name or password is input, the error dialog is displayed.

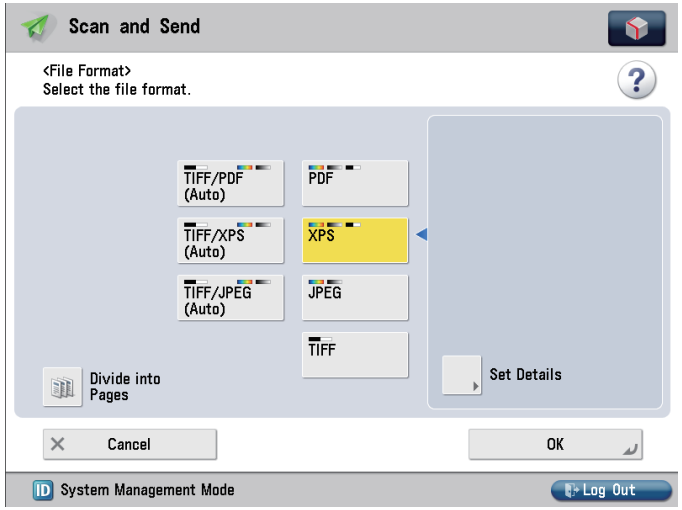
XPS(XML Paper Specification)

Supported Operating Systems: Windows Server 2003; Windows Vista; Windows XP Service Pack 2

Browser software: XPS Viewer EP(included in Microsoft XML Paper Specification Essentials Pack)

XPS	SEND function list	Details
	Single-Page XPS MMR	Single-Page XPS(OCR)
	Multi-Page XPS MMR	Multi-Page XPS(OCR)
	Searchable	Auto -rotation(document orientation detection)
		Auto -rotation restriction(document placement prioritised)
	Digital Signature XPS	User Signature(MEAP authentication method)
		Device Signature

T-2-12



F-2-23

USB Keyboard support

When the following conditions are fulfilled, input from a USB keyboard is possible while the software keyboard is being displayed on the unit's touch panel.

- Service Mode Level 2 > Option > USER > USBI-DSP to "1"
- Settings/Registration > Preferences > External Interface > USB Settings > Use MEAP Driver for USB Input Device set ON
- A USB keyboard enabled for USB ports is connected to and recognised by the unit.
- Input is only accepted when the keyboard is being displayed on the unit's touch panel.

F-2-24

Restrictions

- A maximum of two USB keyboards or USB keyboard type card readers can be connected.
- Some non recommended keyboards will not work. (Recommended keyboard: Cherry G84-4100PTAUS)
- Keyboard input cannot be accepted into Web browser windows.
- Some MEAP applications are not supported.

Initialization of all data and settings

Purpose:
Previous devices did not have the function to erase all the user data collectively. However, the following function was newly added: The user data in the device including the hard disk can be initialized by the user's operation.
In order to maintain the confidential information, we provide the function to erase all the user data stored in the iR device (image data, various logs, Address Book, Additional Functions settings, etc.) collectively.

Limitations:

a. Confirmation of the erased data
The function to confirm if all the data are erased collectively is not provided.
Verification after erasing the hard disk, such as Verification Check, is not performed.
b. Installed License key (Register information of Valid license)
It never happens that installed license key is deleted (valid license becomes invalid) by batch deletion.
In order to delete license key (make valid license invalid), Service Mode Item Used to Invalidate a License for Transfer to a Different Device (Level 2), which is described in 4.4.2, is required.
c. Limitation of the device
When erasing all the user data collectively, LAN and FAX lines are disconnected, so you cannot access from the outside.
d. Limitation of the job
When erasing all the user data collectively, all jobs in the device are erased.
e. NewCardReader
When mounting NewCardReader, execution of 'Initialize All Data/Settings' results in deletion of department ID information, leading to the screen not being able to move to standard screens such as COPY screen. Setup of NewCardReader must be performed again.
f. MEAP Application
When 'Initialize All Data/Settings' is executed in the machine in which MEAP application is installed, the MEAP application is deleted from the machine, resulting in the same condition as the one uninstalled with the MEAP application. Re-installation of MEAP application enables the use of MEAP application from the point the application was uninstalled.
g. Function Restriction Mode
Items in 'User Mode > Management Settings > Device Management > Function Restriction' are not initialized by executing 'Initialize All Data/Settings'

Data to be erased

- Data stored in mail boxes/Advanced Box
- Data stored in Fax/I-Fax Inbox (Confidential Fax Inbox/Memory RX Inbox)
- Address data stored in the Address Book
- Scan settings registered for the Sending function
- Mode Memory settings registered for the Copy or Mail Box function
- MEAP applications and license files
- Data saved from MEAP applications
- The password for the SMS (Service Management Service) login service of MEAP
- (If you changed the password, it returns to the default password.)
- User authentication information registered in the Local Device Authentication system of SSO-H (Single Sign-On H)
- Unsent documents (reserved documents and documents set with the Delayed Send mode)
- Job history
- Settings/Registration settings
- Forms registered for the Superimpose Image mode
- Registered forwarding settings
- Key Pair and Server Certificate registered in [Certificate Settings] in [Device Management] in Management Settings (from the Settings/Registration screen)
- Auto Adjust Gradation

Data not to be erased

- Counter
- SoftID(License Registraton/License key)
- Values in Service mode which are adjusted in the factory
- System software
- System data (such as the preinstalled font data)
- Limited Function Mode (Settings/Registration > Management Settings > Device Management > Limited Function Mode (On/Off)

All the data related with the printer are erased collectively. Then, the data are restored from the backup data, so the data will be the state of the default settings. Therefore, the fonts which the user installed will be erased.

How to erase

- Without Security Kit or HDD Data Erase Kit-A1

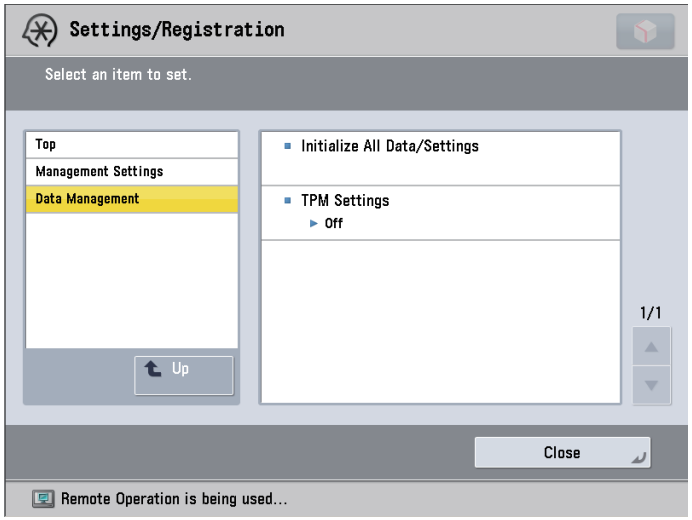
Only the logical information of FAT(File Allocation Tables) is erased.

- With Security Kit or HDD Data Erase Kit-A1

All the data are erased in the magnetic level according to the Erase mode.

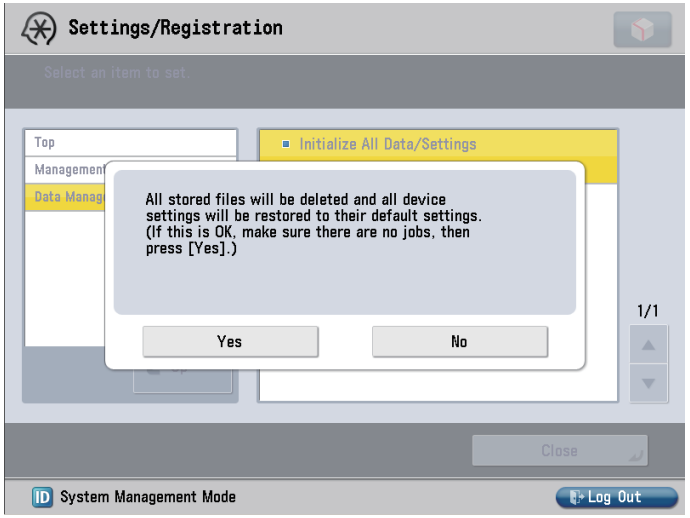
How to erase the data collectively:

- Select "Additional Functions", "System Settings" and "Install All Data/Settings" in order.



F-2-25

- Select "Yes" in the confirmation dialog box.


Settings/Registration
Select an item to set.
Top
Initialize All Data/Settings
All stored files will be deleted and all device settings will be restored to their default settings. (If this is OK, make sure there are no jobs, then press [Yes].)
Yes
No
1/1
Close
System Management Mode
Log Out

F-2-26

- After rebooting the device, erasing all the data is executed.

Specification of erasing the data:

SRAM

Select Service Mode, Copier, Function and Clear in order. Then, write whether the data are to be erased when erasing all the user data collectively.

Service Mode->Copier->Function->Clear

Data to be erased	To be erased?	Description
ERR	Keep	Indicates the error code information latched at the occurrence of error
DC-CON	Keep	Indicates RAM information of DC controller PCB
R-CON	Keep	Indicates RAM information of reader controller PCB.
JAM-HIST	Keep	Indicates jam history
ERR-HIST	Keep	Indicates error code history
PWD-CLR	Erased	Indicates password for system administrator
ADRS-BK	Erased	Indicates address book data
CNT-MCON	Keep	Indicates service counter information counted by the main controller
CNT-DCON	Keep	Indicates service counter information counted by the DC controller
OPTION	Keep	Backup information of Service Mode (OPTION)

Data to be erased	To be erased?	Description
MMI	Erased	User Mode setting value -User setting value for copy control panel -Common settings, User settings -Other user setting values except for FAX-related settings
NM-CON	Keep	Indicates all RAM data within controller
CARD	Erased	Indicates card ID (department)-related data
ALARM	Keep	Indicates alarm log
SLT-CLR	Erased	Indicates salutation settings
SND-STUP	Erased	Indicates transmission-reading settings
CA-KEY	Keep	Indicates CA certificate and key pair
DRN-LIFE	Keep	Indicates drum life
YTN-CLR	Keep	Indicates clearance of Y toner counter
CTN-CLR	Keep	Indicates clearance of C toner counter
MTN-CLR	Keep	Indicates clearance of M toner counter
KTN-CLR	Keep	Indicates clearance of K toner counter

T-2-13

Item	Clear or Keep	Data to be initialized
TEL	Clear	telephone number registration data (*1)
USSW SW	Clear	user data and data registered under Service Mode #1 through #3. of user data, the memory management data will not be deleted. image data collected in memory will not be deleted.
SRV SW	Keep	user data and data in Service Mode #1 through #3, #7.
NCU	Keep	data under Service Mode #4.
SRV DATA	Keep	system dump list data.
REPORT	Keep	communication control report data.
ALL	Keep	all settings/registered data except data under Service Mode #5 TYPE.
COUNTER	Keep	number of prints, number of sheets read.

T-2-14

HDD

Data to be erased	To be erased?
Stored compression image data	OK
Temporary file, log data, others	OK
PDL spool	OK
FAX reception guaranteed	OK
Address Book/Filter	OK
MEAP application	OK
General	OK
Document management table, profile	OK
Font used in PDL, others	OK
Execution module, message file, RUI contents	NG

T-2-15

The number of rewriting the hard disk

Depending on whether there is Security Kit/HDD Data Erase Kit or not, the erasing method of the hard disk data when erasing all the user data collectively will change.

- Without Security Kit

Erase mode is fixed with NULL: 1 time. Other modes are not selectable.

- With Security Kit

From Service Mode(HDCR-DSP), any Erase mode can be specified.

There are three patterns of the Erase mode; NULL: 1 time, Random: 1 time, Random: 3 times

COPIER>OPTION>USER		
Specification selection related to user mode		
Sub item	Description	level.
HDCR-DSP	Used to turn off display of user mode hard disk clear mode and switch clear operations. 0: Don't display and don't clear 1: Clear once with zeroes 2: Clear once with random data 3: Clear 3 times with random data (mode displayed for settings 1 to 3) MEMO: function for HDD initialization This is the function to clear the data on HDD completely by overwriting the 0 (null) data and random data to file data area at the moment of deleting files logically (timing for deleting the administrative information data) in HDD.	2

T-2-16

3 Installation

Installation procedure

Installation Procedure

Overview of the Installation Procedure

As a rule, the user is expected to obtain a license key and register it to the device. Detailed instructions are found in the User's Guide. The following is an outline of the instructions:

1. Using the following URL, access the LMS, and obtain the license key by following the instructions shown on the screen:

http://www.canon.com/lms/license/

NOTE
A license key is issued in exchange for the 16-digit number indicated on the License Access Number Certificate and the serial number of the device (e.g., ABC01234) to which the license will be registered. The device serial number will be indicated in response to a press on the Counter key on the iR device (under [Serial Number]).

2. Copy the 24-digit number shown on the Web browser screen in the space given for the purpose on the License Access Number Certificate sheet.

Important
Be sure to double-check the number to avoid an error. Be sure that the user is aware of the importance of the License Access Number Certificate and that it must be stored away in a safe place.

3. Make the following selections: user mode>system control setup>license control. Then, type in the 16-digit number, and click [Execute]. In response, the license key will be registered and the appropriate functions will be enabled. Otherwise, any of the following error messages will appear:

"The number of the license key is not correct. Check the license key."
>> Make sure that the license key is not issued for a different device.
>> Make sure that the number has been correctly typed in.
>> Make sure that the license key is the correct one.

"The function has already been enabled."
>> Make sure that the Kit has not already been enabled.

4. Turn off the main power switch and turn it back on.

5. The registered license will become valid when the device is turned back on. When it has started normally, press the Counter key, and click the Device Configuration button to make sure that the Kit is indicated as part of the options.

Device Signature PDF

Overview

The machine signature function enables identification of the very machine used to scan the original of a file, thus preventing data manipulation. It makes use of a unique CA certificate and key stored within the machine.
The CA certificate and key used by the machine signature mechanism may be exported from an iR machine to an outside target, but the target must also be an iR machine (e.g., not a PC).
The certificate used for the function is created or updated through the control panel. Its validity is fixed to 5 years, but may be updated for continued use.
Management Settings>Device Management>Certificate Settings>Generate Key>Generate/update Device Signature Key

F-3-1

Registering the License Information

Make the following selections: Additional Functions>System Settings>License Registration, and type in the license number obtained from the LMS; after pressing the Execute button, follow the instructions on the control panel to turn off and then back on the iR machine.

F-3-2

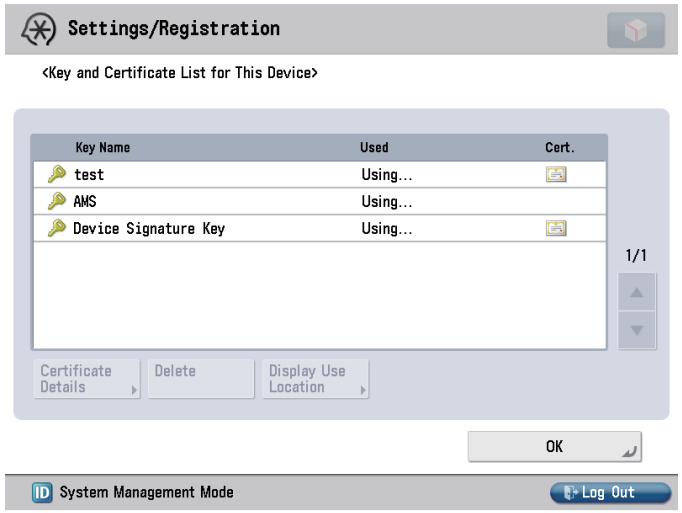
Generating the CA Certificate and Key for the Machine Signature Function

Management Settings>Device Management>Certificate Settings>Generate Key>Generate/update Device Signature Key

F-3-3

Management Settings>Certificate Settings>Key and Certificate list

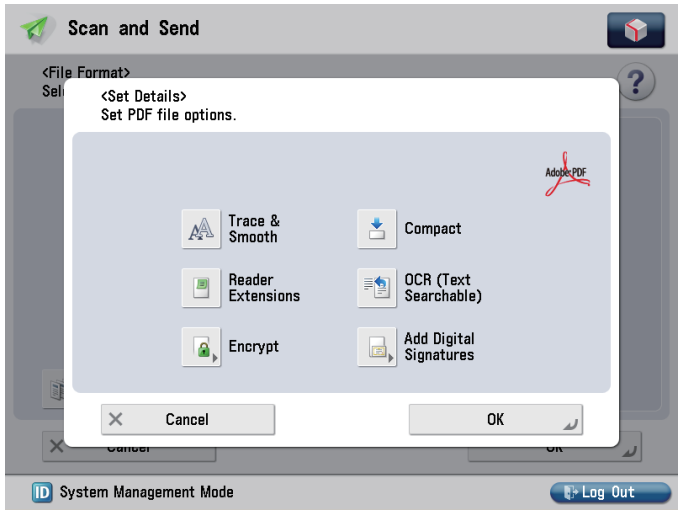
Make the following selections to see that the appropriate machine signature key has been generated:



F-3-4

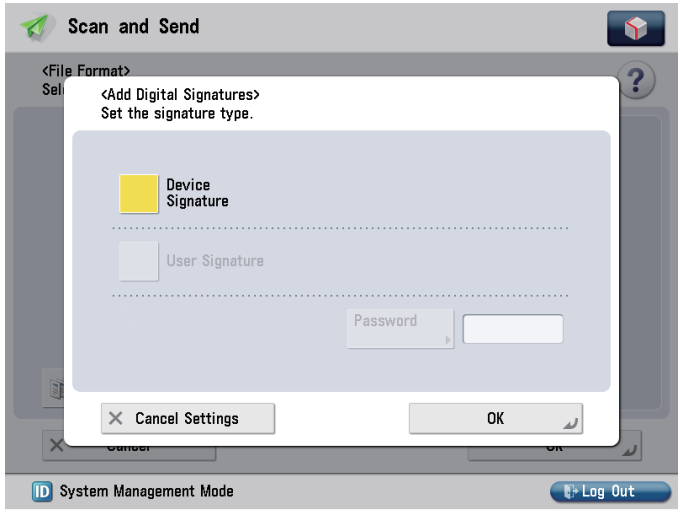
Transmitting a Machine Signature PDF File

Using SEND, indicate a file or e-mail address, and press the File Format button. Select 'PDF', and press the Add Digital Signature button.



F-3-5

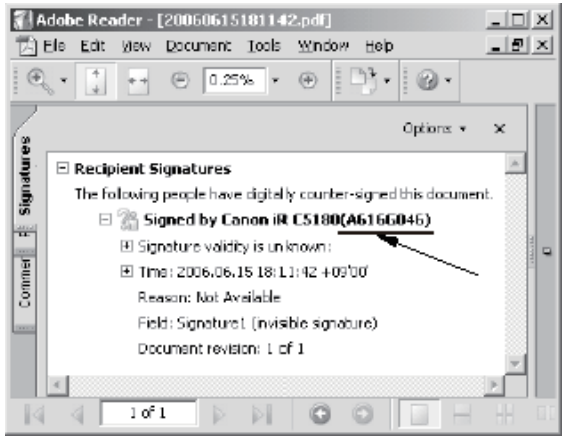
Select 'Machine Signature', and press the OK button.



F-3-6

Using Acrobat Reader, open the PDF file that has been transmitted after scanning an image. Check to be sure that the signature tab shows a machine signature.

Signature Tab as Viewed in Acrobat Reader



F-3-7

Making SSOH Settings

SSOH (Simple Device Login Hybrid) is a login service that can be used with stand-alone iR devices.
SSOH is used by utilising the SMS (Service Management Service) on the iR unit, via a PC on the network.

Enabling SSOH Using the SMS

Management Settings>License/Other>MEAP Settings>Use HTTP then Enable (ON)

- If a PC is used in combination with a Web browser, set it so that the cookie function and JavaScript may be used.

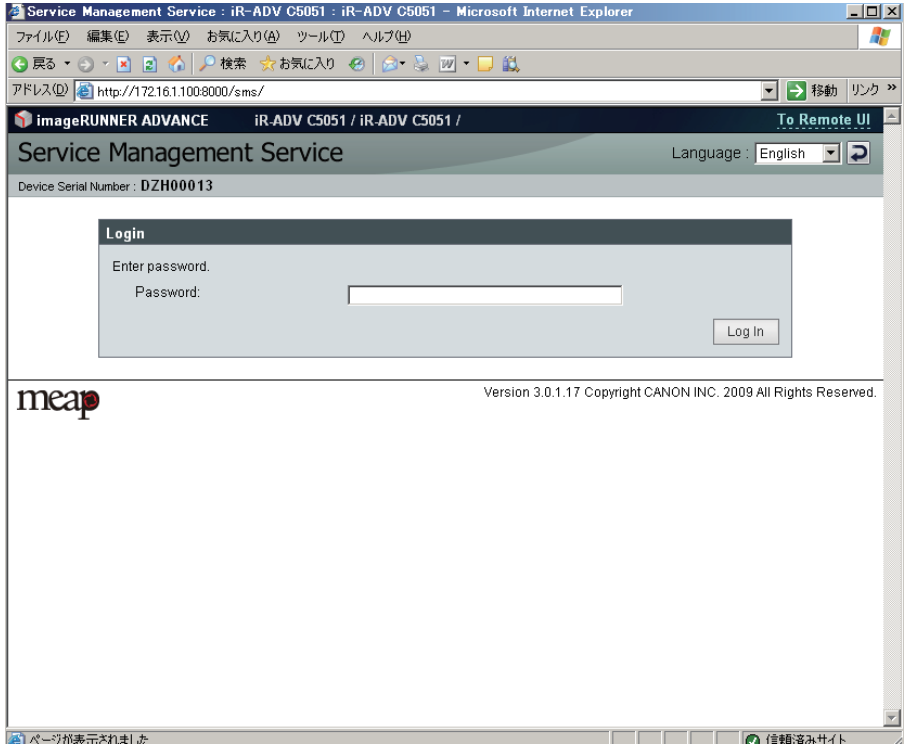
- MEAP applications are written using JavaScript, and SSOH and SMS operate as MEAP applications. In other words, they will not function without access to JavaScript.

- When an MEAP application communicates with an outside entity, SSL must always be brought in for use. When a connection is established (logged in), port 8000 will use a cookie to connect to a different port (redirecting). This series of operations cannot be executed for connection to the SMS unless cookies may be used.
- All characters typed in through a Web browser must be those that may be used on the touch panel of the iR machine.

A Windows PC typically uses shift JIS (character code), while MEAP applications (written in JavaScript) use UTF-8, not permitting the use of special characters, which are expressed differently between shift JIS and UFT-8.

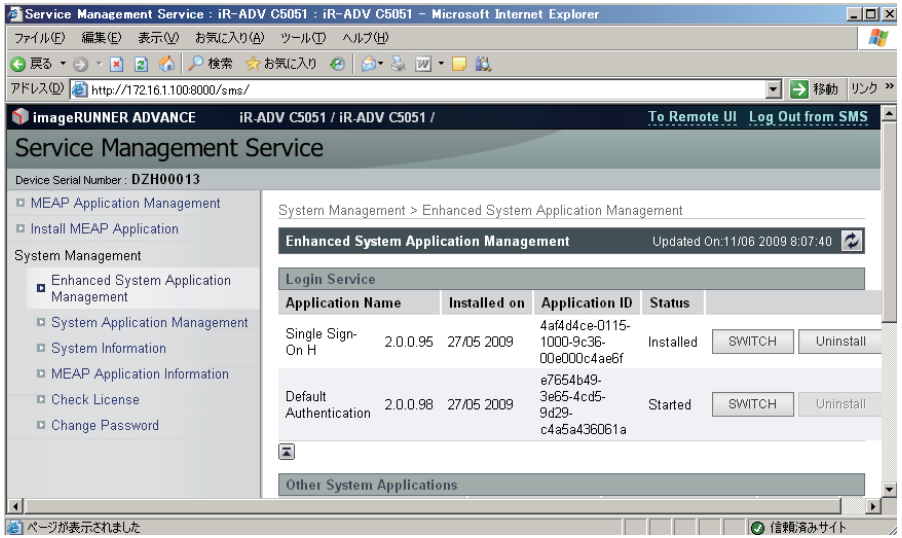
1. Type in the following URL as 'address' in the PC's Web browser:
http://iR machine's IP address:8000/sms/

2. When the Log-in page of the SMS has appeared, type in the appropriate password, and press the Log-in button.
At time of shipmen, the password is 'MeapSmsLogin'. (case-sensitive)


Service Management Service : iR-ADV C5051 : iR-ADV C5051 - Microsoft Internet Explorer
ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)
戻る 検索 お気に入り
アドレス(D) http://172.16.1.100:8000/sms/
移動 リンク
imageRUNNER ADVANCE iR-ADV C5051 / iR-ADV C5051 /
To Remote UI
Service Management Service
Language : English
Device Serial Number : DZH00013
Login
Enter password.
Password:
Log In
meap
Version 3.0.1.17 Copyright CANON INC. 2009 All Rights Reserved.

F-3-8

3. Select 'System Management'.
4. Select 'Enhanced Sys.App'.
5. Select 'Single Sign-On H'.
6. Press the Select button.



F-3-9

7.Turn off and then back on the iR machine.
Hold down the ON/OFF button on the control panel for 3 sec or more, and follow the instructions in the display to turn off the main power.

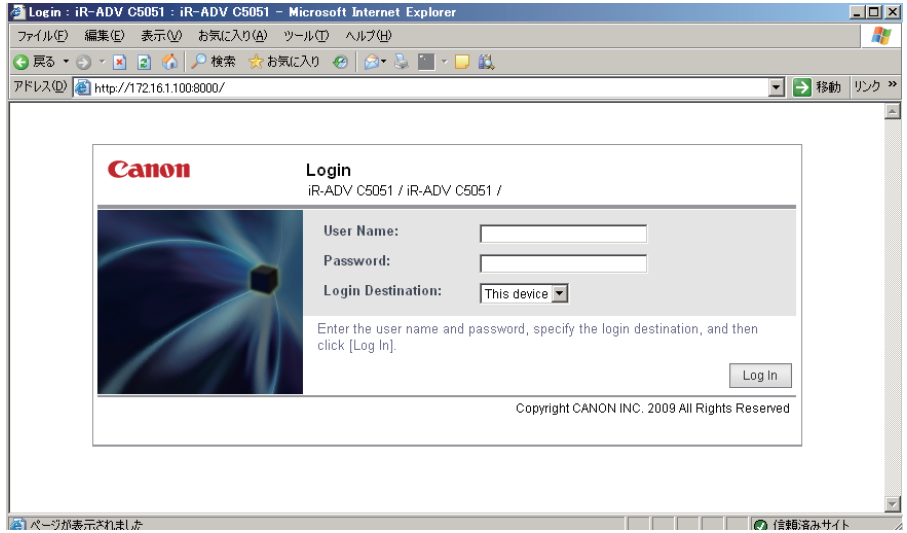
Registering SSOH Users

1. Start up the Web browser on the PC.
2. Type the following URL in 'address'. (case-sensitive)

-If TCP/IP Settings>Use HTTP is enabled (ON) as part of the network settings of the iR machine,
http://iR machine's IP address:8000/sso/

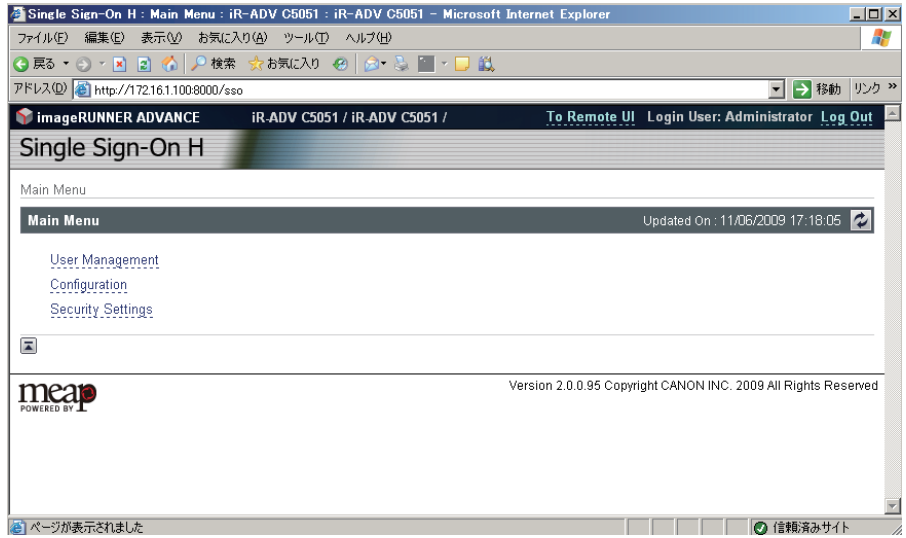
-If TCP/IP Settings>Use HTTP is disabled (OFF) as part of the network settings of the iR machine,
http://iR machine's IP address/sso/

The Log-in page appears.
3. Type in the name and password of the user that has been registered as administrator of SSOH, and click 'log-in'.
At time of shipment, the user name is "Administrator" and the password, "password." (case sensitive)


Login : iR-ADV C5051 : iR-ADV C5051 - Microsoft Internet Explorer
http://172.16.1.100:8000/
Canon
Login
iR-ADV C5051 / iR-ADV C5051 /
User Name:
Password:
Login Destination:
This device
Enter the user name and password, specify the login destination, and then click [Log In].
Log In
Copyright CANON INC. 2009 All Rights Reserved

F-3-10

4. When a connection has been established (logged in), click [User Management].

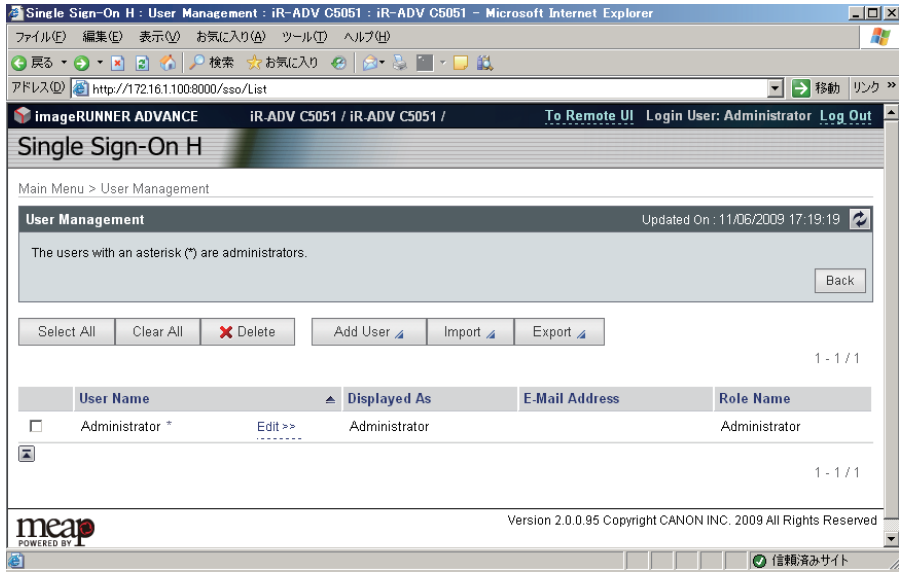


F-3-11

5. Click [Register].

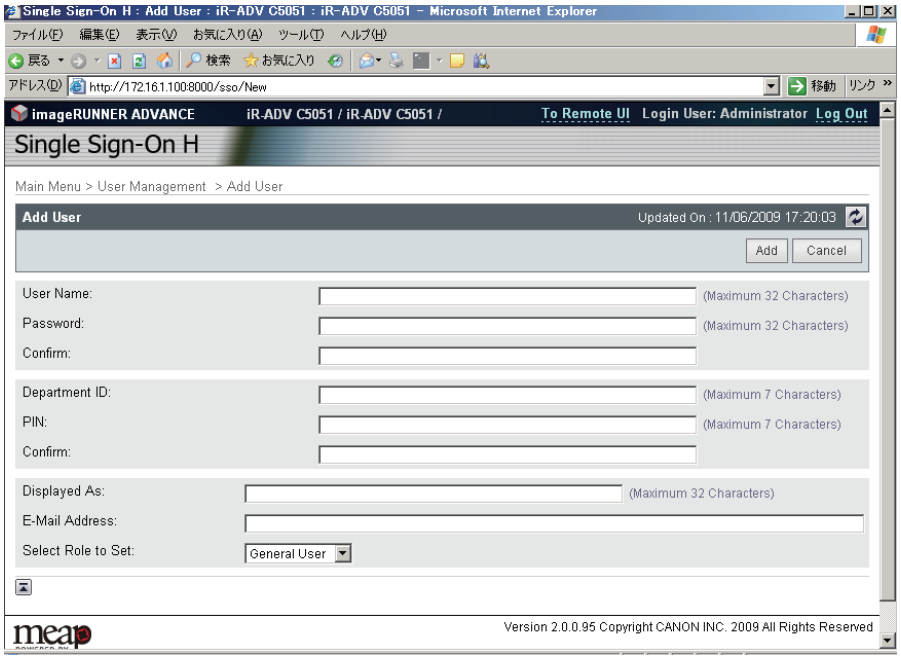
Important

However, there may be no more than 100 users per iR machine.



F-3-12

6. Fill in the relevant fields, and click [OK].



F-3-13

User Signature PDF

Overview

The user signature function serves to enable the identification of users and, thus, the prevention of data manipulation.
When a PDF file is created using this function and displayed in Acrobat, its signature tab will provide information on the user who has singed it, making it possible to assess the propriety of the file data.

User signature PDF files may make use of a user certificate stored on the iR machine. To install a user certificate or to transmit a user signature PDF file, it is necessary to make sure that all following conditions are satisfied:
-The user signature PDF transmission option is enabled.
-The iR machine itself is run on MEAP authentication (SSOH).
-The user certificate of the user in question has been installed.

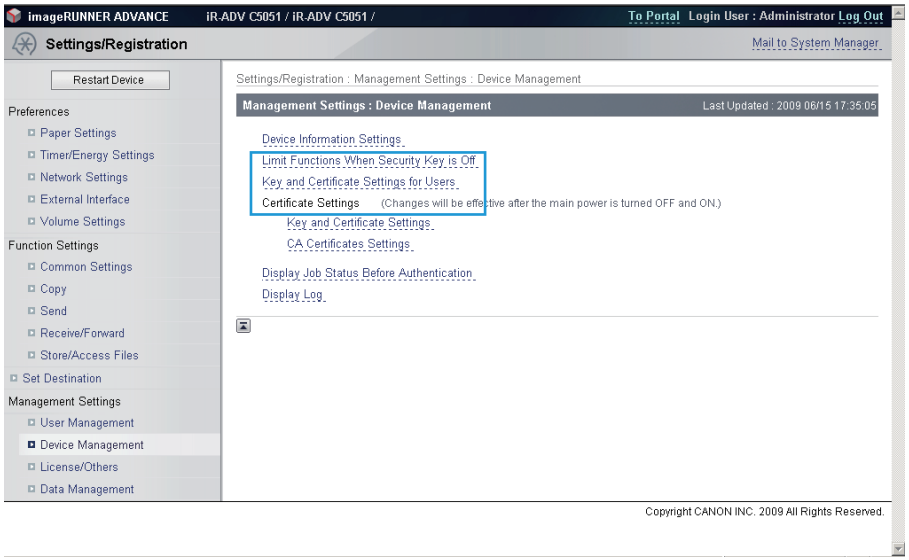
Registering the License Information

Make the following selections: Management Settings>License/Other>License Registration. Then, type in the license number obtained from the LMS, and press the Execute button. Follow the instructions on the control panel to turn off and then back on the iR machine.

F-3-14

Sending a User Certificate Through an RUI to an iR Machine

Set the iR machine so that it is ready for an SSOH MEAP authentication log-in session. On the PC, use the browser to log on to the RUI.
Hereafter, the discussions assume that the user has been registered according to the instructions under "Making SDL Settings."
Selecting 'initial setup/register' of the RUI enables making settings for user keys and certificates (provided that the user certificate PDF license option and the MEAP authentication SSOH have been enabled).



F-3-15

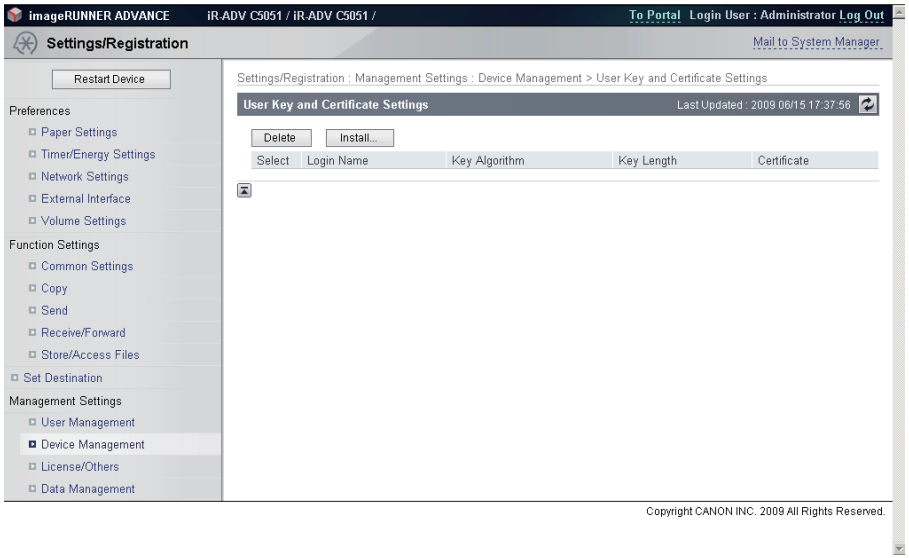
If the log-in has been made as administrator, there will be a list of all users (as many as 100 per iR machine). If the log-in has been as a general user, on the other hand, the RUI will show that user alone.

Obtaining a User Certificate

There must be a User certificate to use a user signature PDF license option. It is likely that a User certificate is provided by the system administrator to each user, but it may nevertheless be created in a demonstration environment. To do so, refer to the information under "Creating a User Certificate for Verification Purposes" in Field Service-Related Implementation.

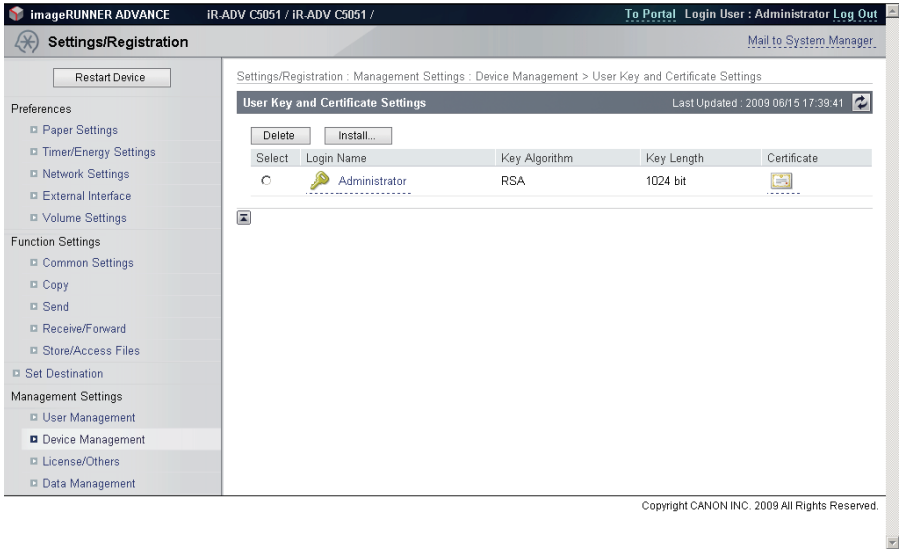
Installable certificate format:

The certificate installable to the host machine iR by using RUI is as follows:
-The certificate file format is only for the PKCS#12 format protected by password.
-The certificate file extension needs to be .p12 and .pfx.
-The key length of the installable certificate is up to 1024bit.
On the User Key Certificate Install screen, select a User certificate file by indicating its path. Then, press the Start Install button.



F-3-16

The long-in name (shown as part of user key/certificate settings) should be as follows: log-in name@domain name. If the domain name is absent, the log-in name is used alone.



F-3-17

Checking the User Key and Certificate List

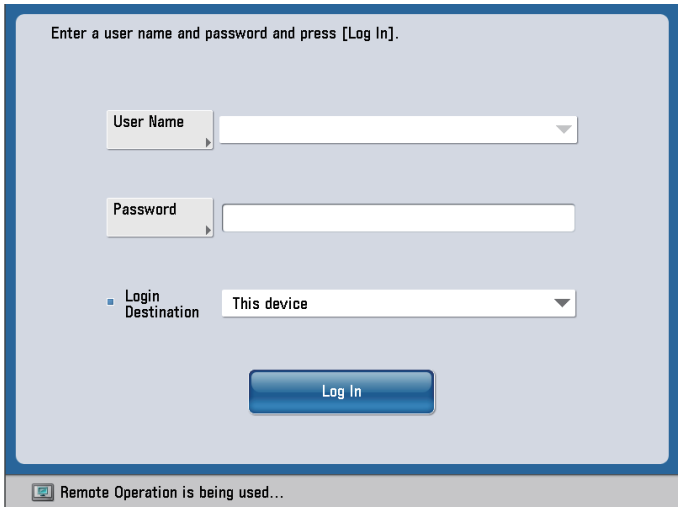
It is necessary to login with the Administrator authority to confirm it.
Make the following selections: Settings/Registration>Management Settings>Device Management>Certificate Settings>Key and Certificate List.

The indication differs from the list used by the SSL server certificate for the following:
-Instead of the key name, the log-in name is used.
-There is no need to enable/disable (ON/OFF) the default key settings and, therefore, there is no button for the purpose.

F-3-18

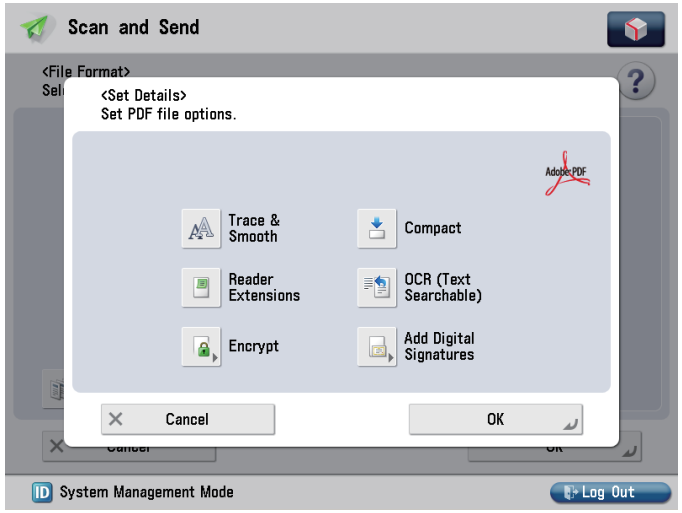
Transmitting a PDF File with a User Signature

If SSOH is in use, the control panel of the iR machine shows the following log-in screen; type in the ID and password to bring up the SEND screen. In the case of SSOH, there is no domain selection field, as the log-in is on the machine itself.



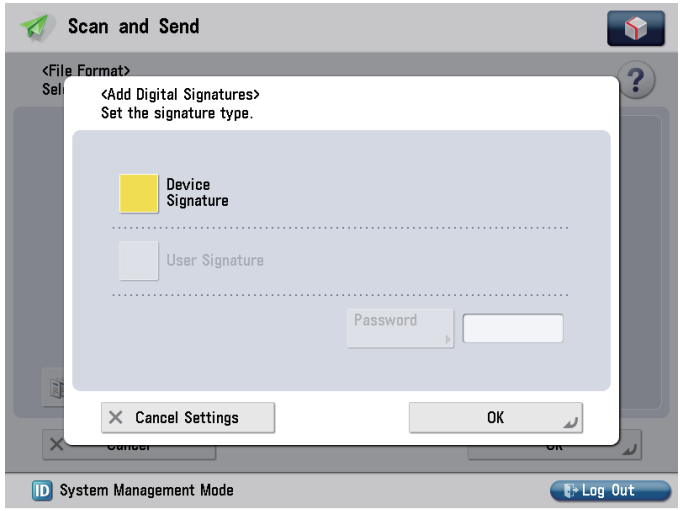
F-3-19

1. On the SEND screen, press the File Format button and then the Add Digital Signature button.



F-3-20

2. Press the User Signature button.

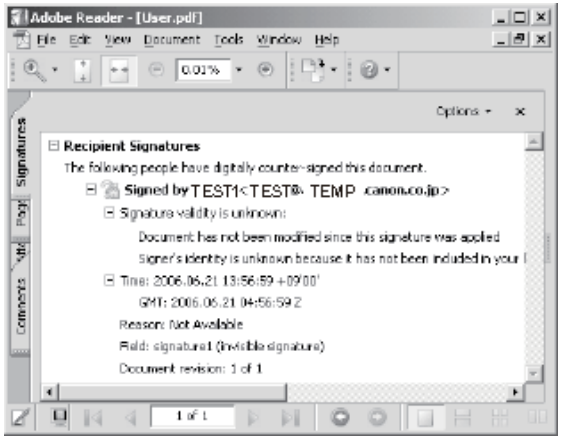


F-3-21

. As in the case of using ordinary SEND functions, place an original on the copyboard or in the feeder, and make the following selections: New Address>E-Mail>File>Store In User Inbox. Fill 'User Inbox' with the appropriate means of transmission from 'Register', and then press the Start key to start scanning the original.

4. When done, open the transmitted PDF file in Acrobat Reader, and check to see that the signature tab shows the correct user information.

Signature Tab as Viewed in Acrobat Reader


Adobe Reader - [User.pdf]
File Edit View Document Tools Window Help
Options
Signatures
Recipient Signatures
The following people have digitally counter-signed this document.
Signed by TEST1<TEST@ TEMP .canon.co.jp>
Signature validity is unknown:
Document has not been modified since this signature was applied
Signer's identity is unknown because it has not been included in your
Time: 2006.06.21 13:56:59 +09'00'
GMT: 2006.06.21 04:56:59 Z
Reason: Not Available
Field: signature1 (Invisible signature)
Document revision: 1 of 1
1 of 1

F-3-22

User Signature creation

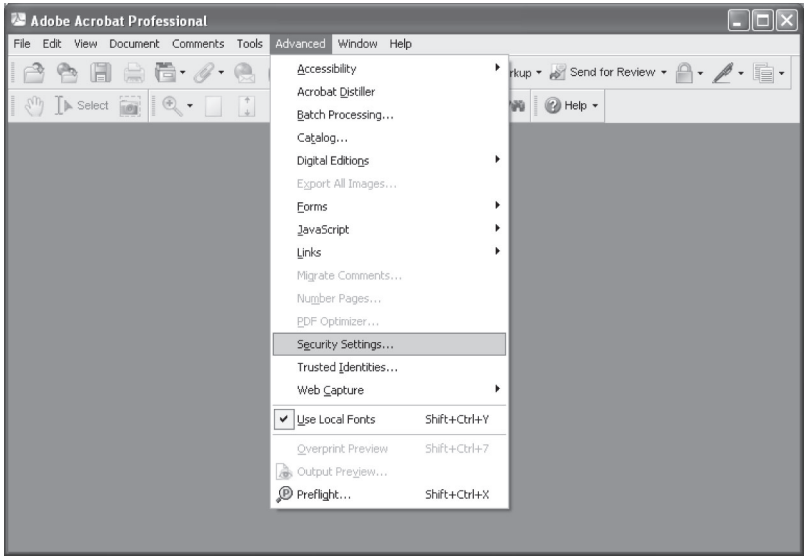
In order to use a User signature PDF, it is necessary to create an User Signature file. The following procedures can be used to create a certificate that can be used easily in a validation environment.

> Important
>
> When 'Use Self-Sign Security Handler to create a digital ID' in the following procedures is carried out, any attempt to alter the created PDF can be detected. However, the details to be displayed in the user certificate need to be confirmed by the person who created it. Even if Acrobat is used to view the details of the certificate, the authenticity of the document cannot be ascertained.

Preparations:

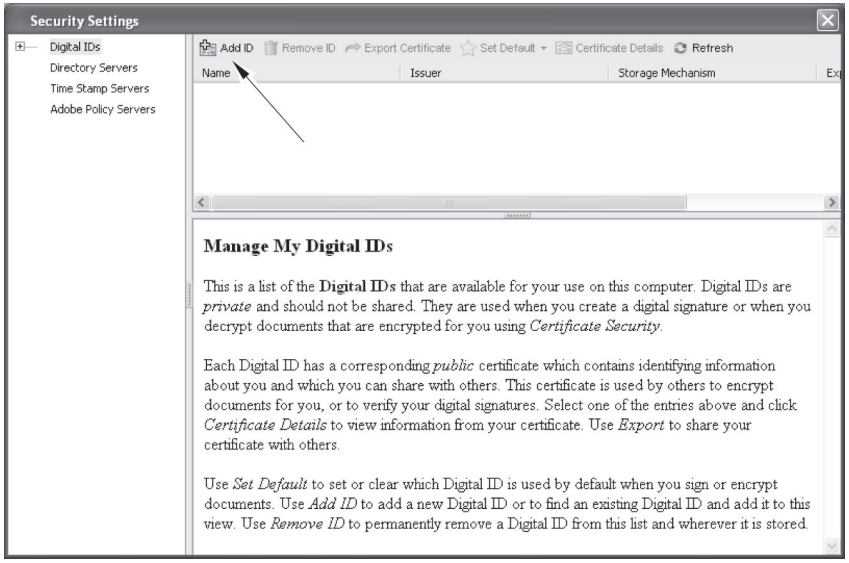
PC running Adobe Acrobat 7.0 Professional

1. Launch Adobe Acrobat 7.0 Professional.
2. Under Advanced, open Security Settings.



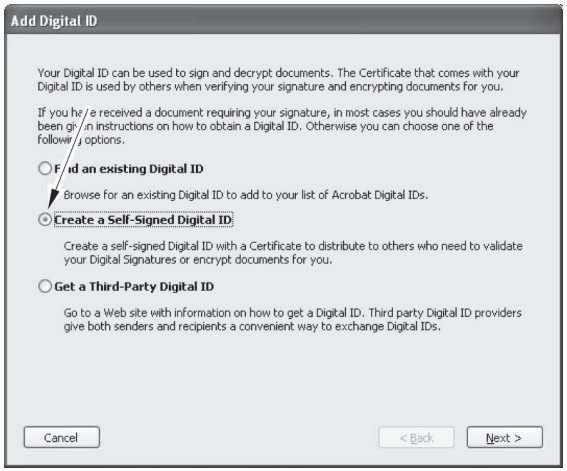
F-3-23

3. Press the Add ID button.


Security Settings
Digital IDs
Directory Servers
Time Stamp Servers
Adobe Policy Servers
Add ID
Remove ID
Export Certificate
Set Default
Certificate Details
Refresh
Name
Issuer
Storage Mechanism
Manage My Digital IDs
This is a list of the Digital IDs that are available for your use on this computer. Digital IDs are private and should not be shared. They are used when you create a digital signature or when you decrypt documents that are encrypted for you using Certificate Security.
Each Digital ID has a corresponding public certificate which contains identifying information about you and which you can share with others. This certificate is used by others to encrypt documents for you, or to verify your digital signatures. Select one of the entries above and click Certificate Details to view information from your certificate. Use Export to share your certificate with others.
Use Set Default to set or clear which Digital ID is used by default when you sign or encrypt documents. Use Add ID to add a new Digital ID or to find an existing Digital ID and add it to this view. Use Remove ID to permanently remove a Digital ID from this list and wherever it is stored.

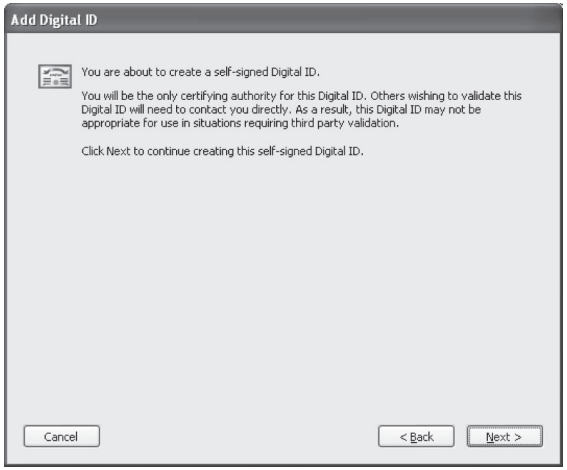
F-3-24

4. Select Create a Self-Signed Digital ID to create a digital ID.


Add Digital ID
Your Digital ID can be used to sign and decrypt documents. The Certificate that comes with your Digital ID is used by others when verifying your signature and encrypting documents for you.
If you have received a document requiring your signature, in most cases you should have already been given instructions on how to obtain a Digital ID. Otherwise you can choose one of the following options.
Find an existing Digital ID
Browse for an existing Digital ID to add to your list of Acrobat Digital IDs.
Create a Self-Signed Digital ID
Create a self-signed Digital ID with a Certificate to distribute to others who need to validate your Digital Signatures or encrypt documents for you.
Get a Third-Party Digital ID
Go to a Web site with information on how to get a Digital ID. Third party Digital ID providers give both senders and recipients a convenient way to exchange Digital IDs.
Cancel
< Back
Next >

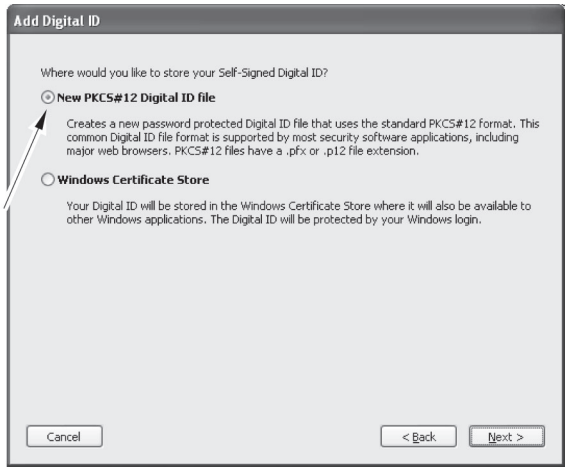
F-3-25

5. Press Next.


Add Digital ID
You are about to create a self-signed Digital ID.
You will be the only certifying authority for this Digital ID. Others wishing to validate this Digital ID will need to contact you directly. As a result, this Digital ID may not be appropriate for use in situations requiring third party validation.
Click Next to continue creating this self-signed Digital ID.
Cancel
< Back
Next >

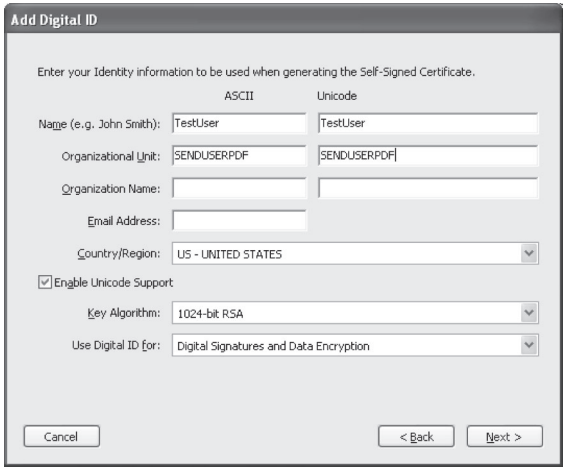
F-3-26

6. Select New PKCS#12 Digital ID File.


Add Digital ID
Where would you like to store your Self-Signed Digital ID?
New PKCS#12 Digital ID file
Creates a new password protected Digital ID file that uses the standard PKCS#12 format. This common Digital ID file format is supported by most security software applications, including major web browsers. PKCS#12 files have a .pfx or .p12 file extension.
Windows Certificate Store
Your Digital ID will be stored in the Windows Certificate Store where it will also be available to other Windows applications. The Digital ID will be protected by your Windows login.
Cancel
< Back
Next >

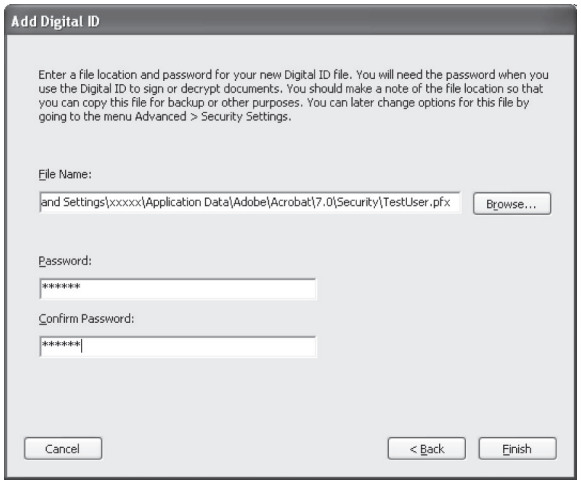
F-3-27

7. Select Enable Unicode Support and fill in the Name and Organizational Unit.



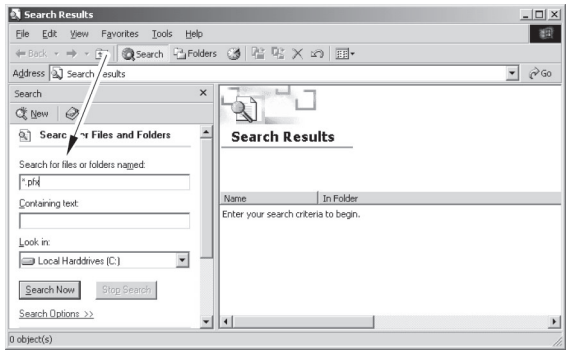
F-3-28

8. Enter the password and press Finish.


Add Digital ID
Enter a file location and password for your new Digital ID file. You will need the password when you use the Digital ID to sign or decrypt documents. You should make a note of the file location so that you can copy this file for backup or other purposes. You can later change options for this file by going to the menu Advanced > Security Settings.
File Name:
and Settings\xxxxx\Application Data\Adobe\Acrobat\7.0\Security\TestUser.pfx
Browse...
Password:
******
Confirm Password:
******
Cancel
< Back
Finish

F-3-29

9. From Start, go to Search for Files and Folders. Enter the folder name and '*.pfx', and begin the search.



F-3-30

10. From the Search Results, find out the storage location of the certification file and then copy the certification file to the desired location.

F-3-31

4 Maintenance

- Notes when service
- Related Service Mode
- Related Error code

Notes when service

Other Points to Note

At times, it is a good idea to print out the user data list (network) and the address table list in user mode before initializing the memory (MMI CLEAR) to keep a backup of the data. (Be sure to obtain the consent of the user before doing so by explaining its importance.) If it is possible to use an RUI, the data may be exported for a backup, thus facilitating restoration work. If the user is using multiple iR machines, it may also be a good idea to make use of 'Device Information Delivery Settings', which is a newly available mechanism.

Recommended setting of system management information

When multiple users use an iR host machine, it is necessary to advise each user to set the system management information.
Setting ID and password of system administrator on the operation unit under (Settings/ Registration) > [Management settings] > [User Management] > [Setting of system administrator's information] has an effect of restraining the third person from falsifying information, for the ID and password are required when a user carries out an important setting of the iR host machine.
Under the environment that the setting is not done, if a user who does not sufficiently know operation situation of the iR tries to change the setting, following troubles may occur.

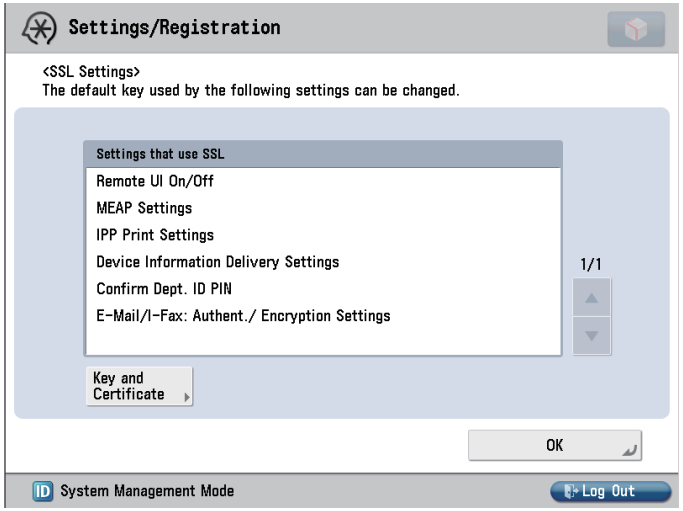
- When the user changes [User ID Management] from [off] to [on], copying operation cannot be done unless ID and password are input.
- When each setting is changed on the network from RUI, that enables to falsify data of address book or delete log.
- When TCP/IP fixed address is changed on the network setting, printing operation via network cannot be done until the port setting is changed.
- When usage restriction of USB device is changed to [on], printing operation via USB becomes disabled.

Creating SSL Key-Pair and Server Certification

When exchanging data between MFP machine and PC/Server, it enables setting to execute encryption by SSL (Secure Sockets Layer).
When executing SSL, it needs to generate key-pair and server certification with MFP machine.
By applying SSL, the following functions are available:

- Remote UI
- IPP Print Settings
- Device Information Delivery Settings
- Dept. ID Management Password Confirmation
- E-Mail/I-Fax: Authent./ Encryption Settings

Settings/Registration > Preferences > Network > TCP/IP Settings > SSL Settings



F-4-1

Generating key-pair and server certification

Important
Up to 2 key-pairs can be registered.

When generating keys inside MFP machine, make the following selections:
Settings/Registration > Management Settings > Device Management > Certificate Settings > Generate Key

F-4-2

Select 'Generate SSL Key' button, then input key name.

F-4-3

F-4-4

Input the items for 'Generate Key: Certificate Settings', and select 'Start Key Generate' button.

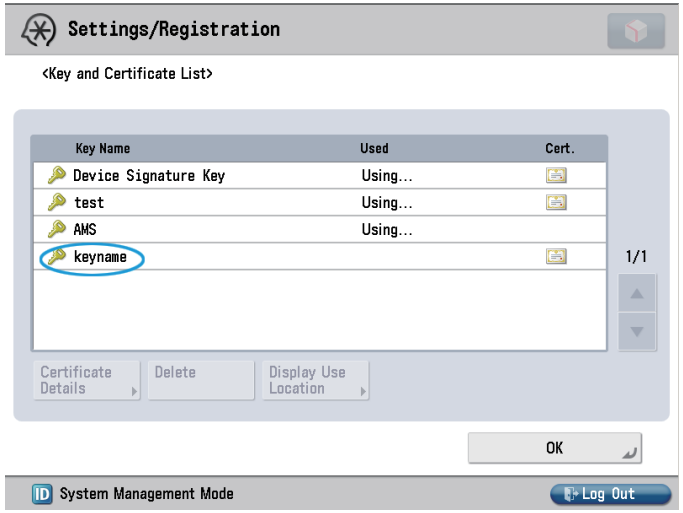
F-4-5

Make the following selections:

Settings/Registration > Management Settings > Device Management > Certificate Settings > Generate Key

Open 'Key and Certificate List'.

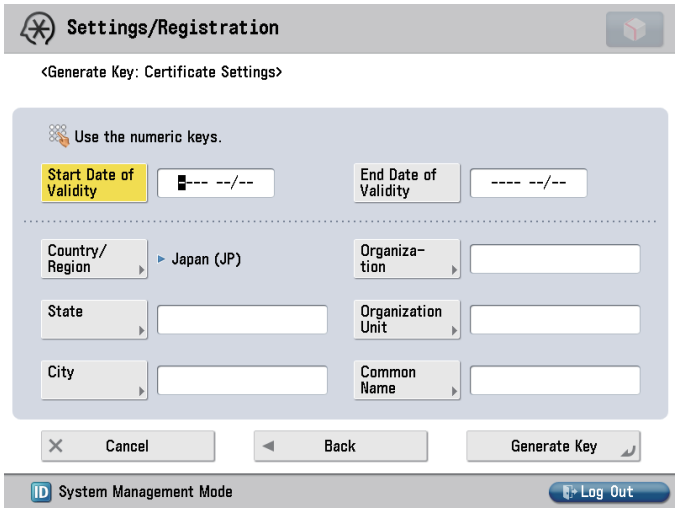
Encryption setting is done if there is a key mark and 'Certificate Details' shown in the display.



F-4-6

In the case of IPPS print from Windows Vista, the Common Name should be the IP address of the host machine when generating SSL key.

Settings/Registration > Management Settings > Device Management > Certificate Settings > Generate key > Generate SSL Key



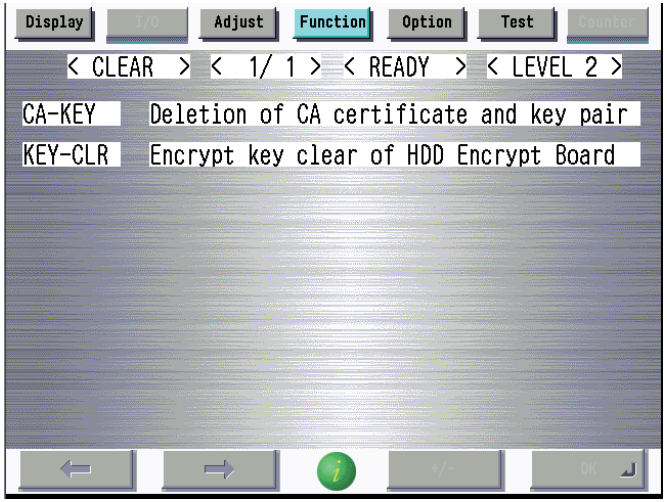
F-4-7

CA-KAY

CA-KAY is service mode to execute “Deletion of CA Certificate and key pair”.
Select LEVEL 2 > COPER > FUNCTION > CLEAR > CA-KEY, then additionally registered CA Certificate and key pair are deleted.

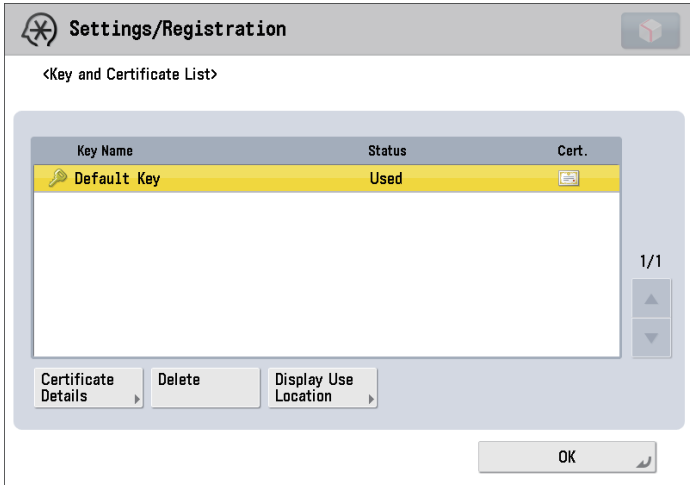
Key pair returns to the same status when shipped from a plant.
Therefore, after execution of CA-KEY, the following actions are required.

When user has added key pair, backup of the key pair is required for recovery.
Key pair for Device Signature PDF requires re-generation.
Key pair for Digital User Signature requires re-registration from RUI.
Key pair that was registered by MEAP application requires re-registration.



F-4-8

By execution of CA-KEY, the default key recovers.



F-4-9

User data Erase of the HDD

If the host machine is used by a user for such cases as demonstration, clear the address book for FAX and the user data on HDD completely and remove the machine from the user's site.
The following are the method to clear HDD completely.

For a machine where the HDD Data Encryption Kit is installed

When clearing the key information with SST, the encryption key of the main controller becomes not identical to that of HDD and all data in the HDD cannot be read.
All data in HDD are targeted. When using the same HDD in the host machine, the following tasks are required.

1) HDD format
2) System installation

In the case that the HDD Data Encryption Kit is not installed

Settings/Registration > Management Settings > Data Management > Initialise all Data/ Settings
If the HDD Data Erase Kit has been installed, the setting in service mode enables overwriting the 0 data and random data to the data area on the deleted HDD and makes decryption more difficult.

COPIER>OPTION>USER		
Specification selection related to user mode		
Sub item	Description	level.
HDCR-DSP	Used to turn off display of user mode hard disk clear mode and switch clear operations. 0: Don't display and don't clear 1: Clear once with zeroes 2: Clear once with random data 3: Clear 3 times with random data (mode displayed for settings 1 to 3) MEMO: function for HDD initialization This is the function to clear the data on HDD completely by overwriting the 0 (null) data and random data to file data area at the moment of deleting files logically (timing for deleting the administrative information data) in HDD.	2

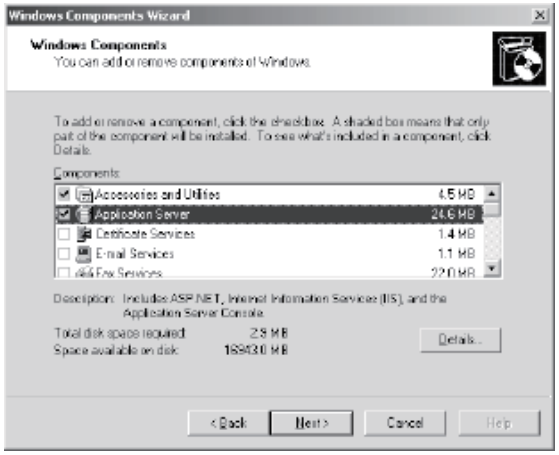
T-4-1

How to create WebDAV environment for verification

The procedure is described in order to improve understanding of WebDAV through the experiment.
For practical use, many anti-virus measures or countermeasures against security are necessary.
The environment created by the procedure must not be connected to the outside or LAN environment because it is highly likely to be the target for attacks targeting IIS.
WebDAV works on the IIS. Therefore, before starting the installation of WebDAV, IIS should be enabled in Windows 2000 Server or Windows 2003 Server.
The setting method in Windows 2003 Server is described below.

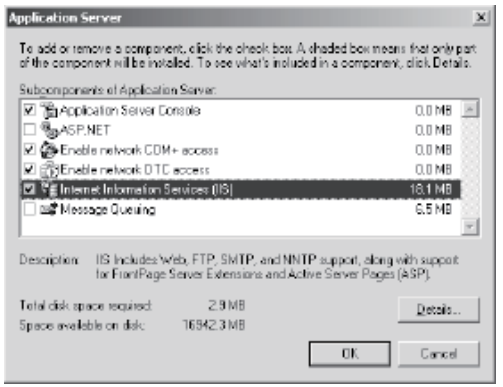
Add the FrontPage 2002 Server Extensions

Select Start > Setup > Control panel > Add or Remove Programs > Add or Delete Window components > Application server, and press 'Detail' button.


Windows Components Wizard
Windows Components
You can add or remove components of Windows.
To add or remove a component, click the check box. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.
Components:
Accessories and Utilities 4.5 MB
Application Server 24.6 MB
Certificate Services 1.4 MB
E-mail Services 1.1 MB
Fax Services 22.0 MB
Description: Includes ASP.NET, Internet Information Services (IIS), and the Application Server Console.
Total disk space required: 2.9 MB
Space available on disk: 16943.0 MB
Details...
< Back
Next >
Cancel
Help

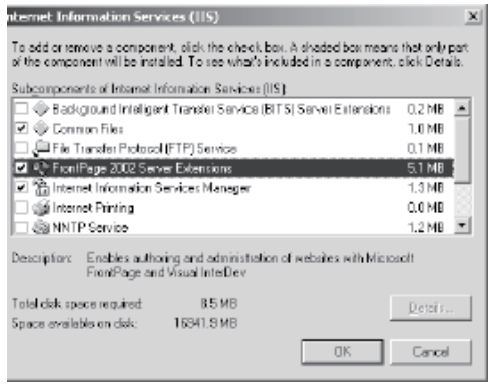
F-4-10

Select 'Internet Information Service (IIS)' and press 'OK'.

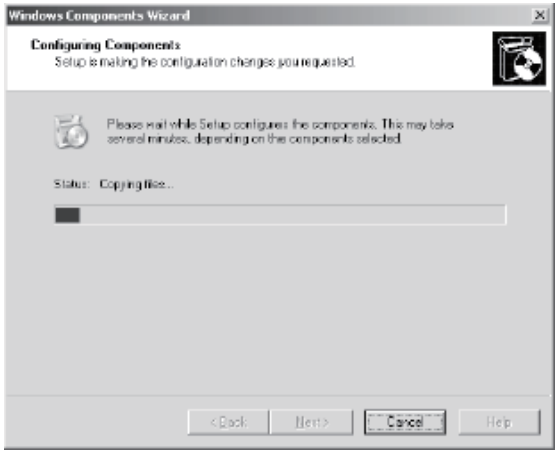

Application Server
To add or remove a component, click the check box. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.
Subcomponents of Application Server:
Application Server Console 0.0 MB
ASP.NET 0.0 MB
Enable network COM+ access 0.0 MB
Enable network DTC access 0.0 MB
Internet Information Services (IIS) 18.1 MB
Message Queuing 6.5 MB
Description: IIS includes Web, FTP, SMTP, and NNTP support, along with support for FrontPage Server Extensions and Active Server Pages (ASP).
Total disk space required: 2.9 MB
Space available on disk: 16842.3 MB
Details...
OK
Cancel

F-4-11

Select 'FrontPage 2002 Server Extensions' and press 'OK'.


Internet Information Services (IIS)
To add or remove a component, click the check box. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.
Subcomponents of Internet Information Services (IIS):
Background Intelligent Transfer Service (BITS) Server Extension 0.2 MB
Common Files 1.0 MB
File Transfer Protocol (FTP) Service 0.1 MB
FrontPage 2002 Server Extensions 5.1 MB
Internet Information Services Manager 1.3 MB
Internet Printing 0.0 MB
NNTP Service 1.2 MB
Description: Enables authoring and administration of websites with Microsoft FrontPage and Visual InterDev.
Total disk space required: 8.5 MB
Space available on disk: 16941.9 MB
Detail...
OK
Cancel

F-4-12


Windows Components Wizard
Configuring Components
Setup is making the configuration changes you requested.
Please wait while Setup configures the components. This may take several minutes, depending on the components selected.
Status: Copying files...
< Back
Next >
Cancel
Help

F-4-13

Press 'Complete' on the completion screen of Windows component wizard.

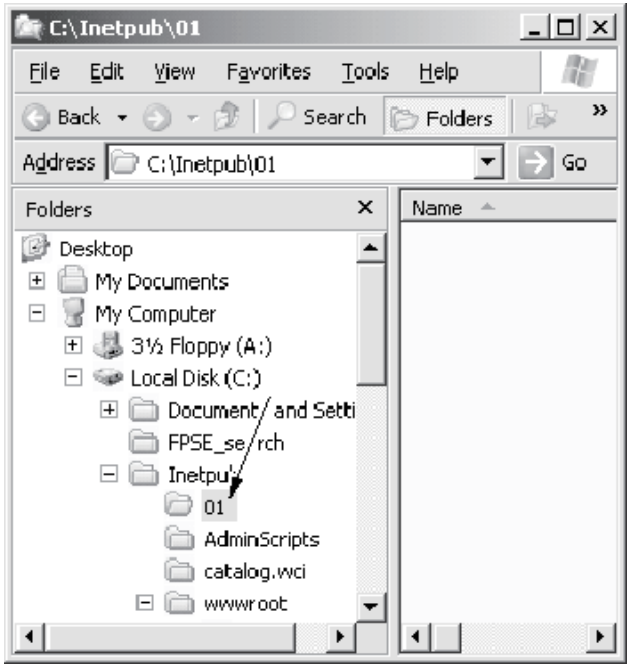
F-4-14

Create new folder to be used in WebDAV under the IIS Web public folder.

Do not make under the C\Intepub\wwwroot\

It is named 01 on the screen.

Usually, [wwwroot] folder should be put outside of [C\] in order to improve security.



F-4-15

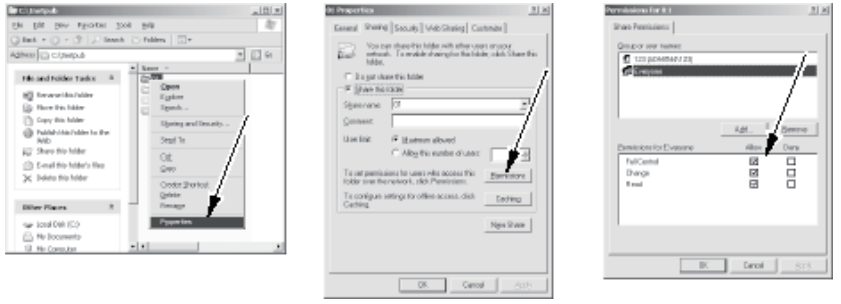
Select created new folder(ex. 01).

Open Properties by mouse right button.

Put Permissions button on the Sharing Tab.

Select Everyone.

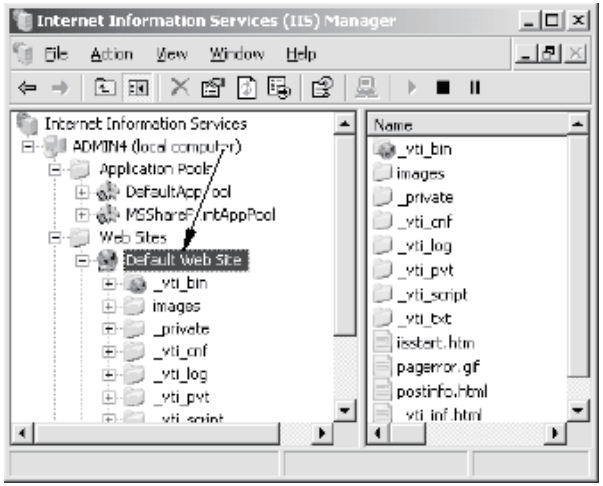
Select Full Control Allow on the Permmisions for Everyone.



F-4-16

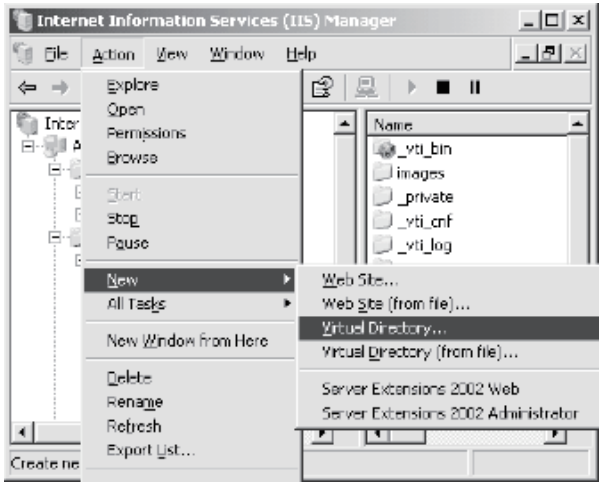
Open Internet Service Manager under Start > Setup > Control panel > Administration tool.

Select Web site directory for WebDAV.



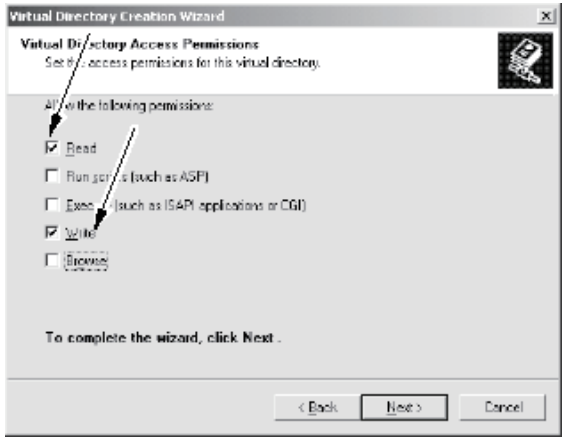
F-4-17

Action>New>Virtual Directory



F-4-18

Select Read and Wite on the Viertual Directory Creation Wizard.

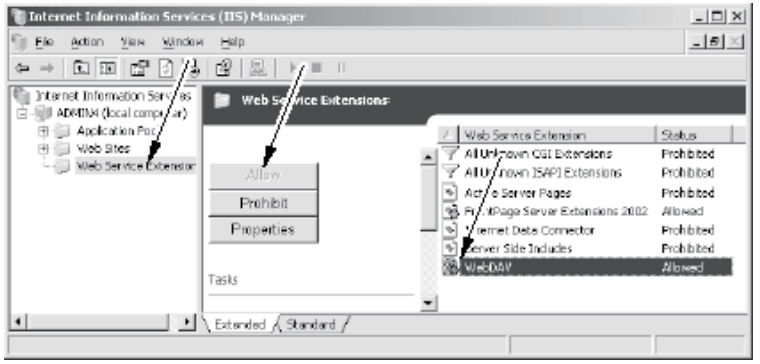


F-4-19

Select Web Service Extensions.

Select WebDAV on the Web Service Extention list.

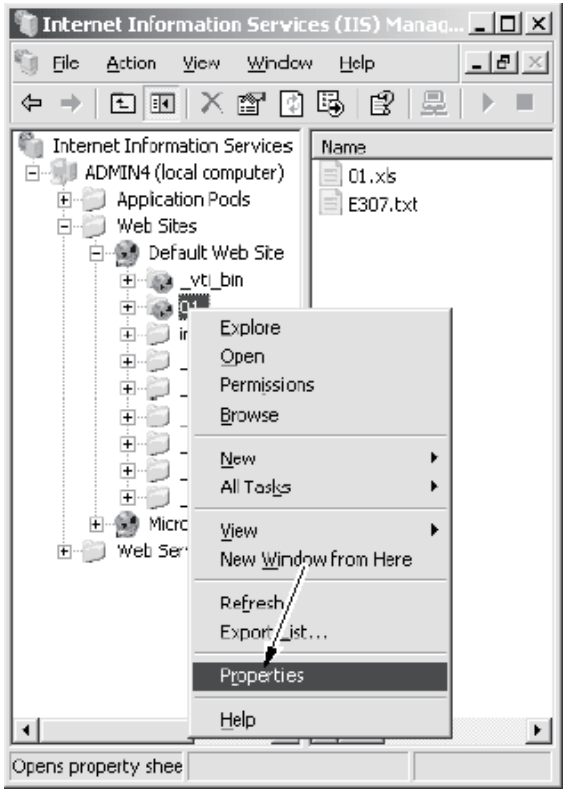
Put Allow Button.



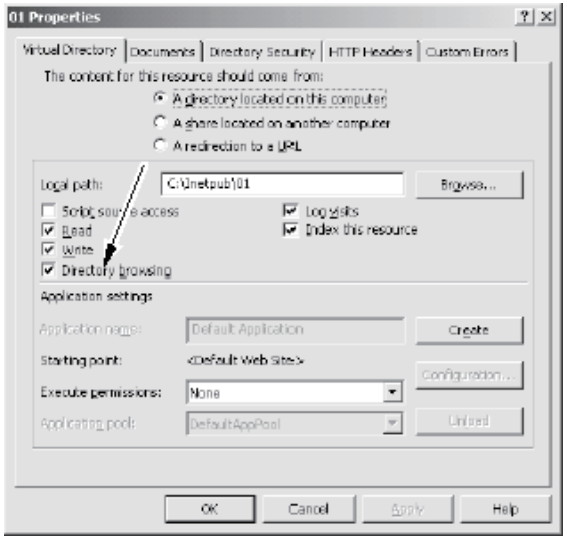
F-4-20

Select Web Site of WebDAV(ex. 01).

Open Properties by mouse right button.



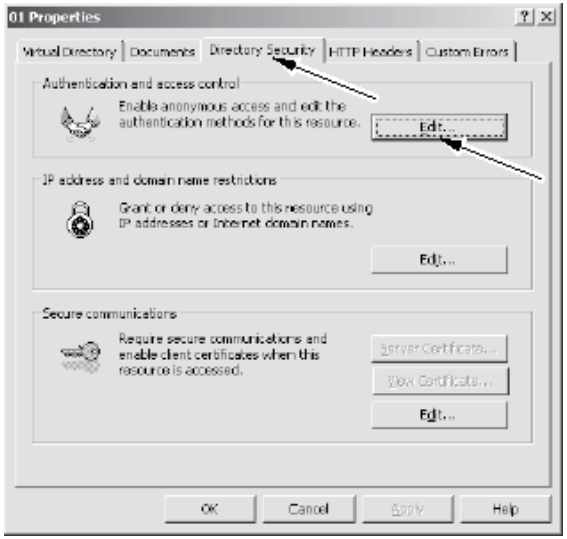
Open Virtual Directory Tab and Select Dierctory browsing. F-4-21



F-4-22

Select Directory Security Tab

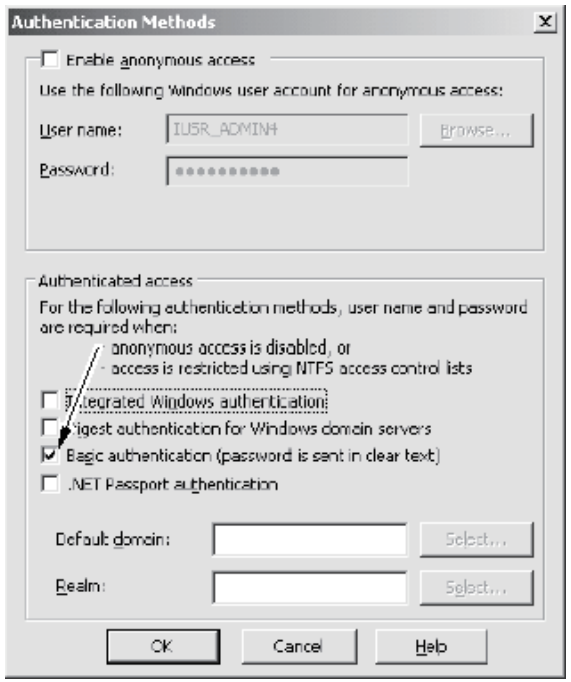
Put Edit button on the Authentication and access control.



F-4-23

The check is removed at the Enable anonymous access.

Select Basic suthentication for Windows domain servers on the Authenticated access.

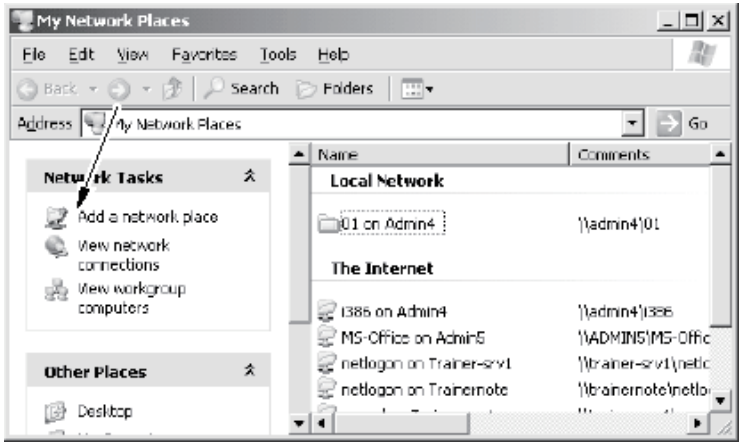


F-4-24

Setup by Client

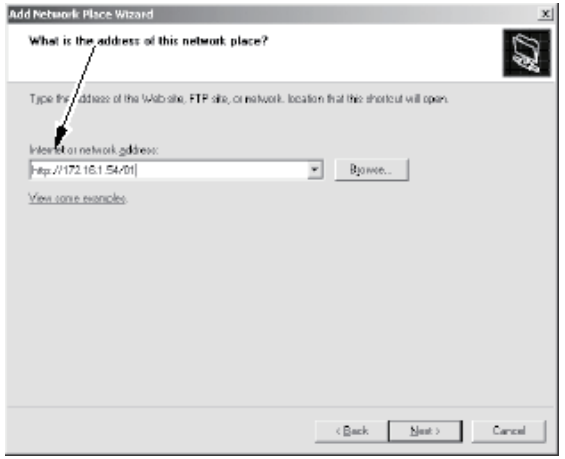
Open the My Network Places on the Desktop.

Select Add a network place.



F-4-25

Input Web Server Address on Add Network Place Wizard.


Add Network Place Wizard
What is the address of this network place?
Type the address of the Web site, FTP site, or network location that this shortcut will open.
Internet or network address:
http://172.16.1.54/01
Browse...
View some examples.
< Back
Next >
Cancel

F-4-26

If you have not ID for Web Server, you need make on the Web Server.

This is Web Server Operation.

Open Computer Management under Start > Setup > Control panel > Administration tool.

Select Local Users and Groups>User.

Open New User by mouse right button.

Input User name and Password.

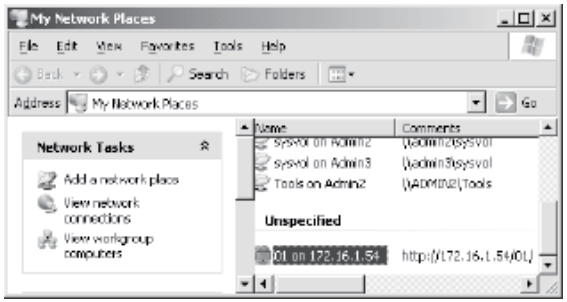
The check is removed at User must chenge password at next logon.

Select Password never expiers.

F-4-27

Open WebDAV Folder

Open My Network Places on the Desk top.
Select WebDAV Folder(ex. 01 on 172.16.1.54).
Open WebDAV Folder(ex. 01 on 172.16.1.54).



F-4-28

Transmission Setup from the iR

At Send/Fax tab on the control panel of the iR, select Register > Register Address > New address > File, and register the address.
Protocol: WebDAV
Host name: https://Server address
Path to Folder: Directory path after the Inetpub
User name: (Basic authentication of WebDAV server, Necessary user name for digest authentication)
Password: (Basic authentication of WebDAV server, Necessary password for digest authentication)

F-4-29

Reference:

In IPv6 environmen:
When you input IPv6 address into a Host Name column with a URI(Uniform Resource Identifier) format, it is necessary to surround the IPv6 address part with a bracket[ ].

When made the host name of the WebDAV address an example; an example:
ex:
fd00:0:ac18:9000:203:baff::80 then port 1234
->
http://[fd00:0:ac18:9000:203:baff::80]:1234/

When you transmitted a message without a bracket, the transmission of a message result finishes failure in end cord #751.

IPv6 settings

The following instructions pertain to connection confirmation when the IPv6 address has been obtained passively, in a local area network with no DHCPv6 server.

IPv6 address automatic settings

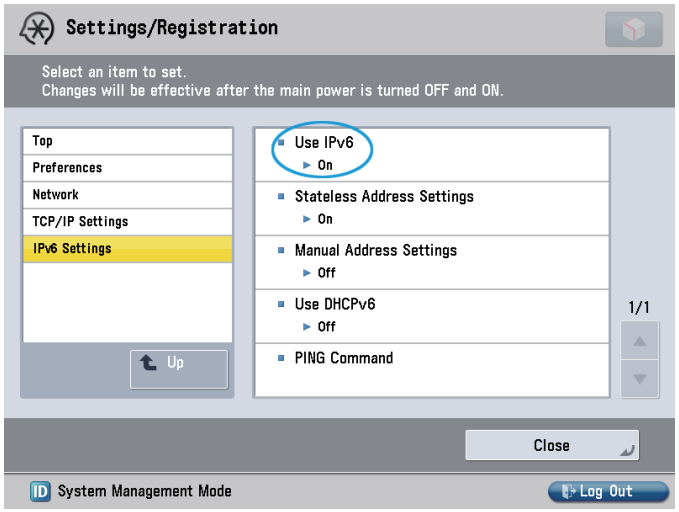
With IPv4, in order to make the address settings automatic, a DHCP server is required.
With IPv6, even without a DHCP server, automatic address settings can be set up as follows.
Multiple IPv6 addresses can be used at the same time.
Refer to the following table to see which addresses can be used.

Address type	Touch panel location	Settable addresses	Address characteristics	Usage conditions
Loop back address	None	1	::1	Always active.Can only be used with Ping on touch panel.
Link local address	Uses IPv6.	1	Begins with fe80.	Automatically generated from unit's MAC address. Active until the main unit's power is turned off. Can be used even if there is a device on the network using the same address.
Stateless address	Stateless address settings	0-4		Router must be able to route Router Advertise.Active until the main unit's power is turned off.Note, however, that there is a time limit on the validity and the address will become invalid once this period expires, unless the validity is automatically renewed.
Manual address	Manual settings	0-1		The following addresses cannot be registered. - Multi-cast addresses [1111 1111]-Addresses comprising all 0 [0000 0000] - IPv4-compatible IPv6 addressesAddresses in which the upper 96 bits are 0 and the lower 32 bits are in IPv4 address hexadecimal notation. E.g. [0::1C10:0120] Addresses used when IPv6 and IPv4 are using an IPv6 environment. -IPv4 -mapped addressesAddresses in which the upper 80 bits are 0, the following 16 bits are 1 and the lower 32 bits are in IPv4 address hexadecimal notation. E.g. [0::FFFF:1C10:0120] Addresses used when IPv4 is using an IPv6 environment.
Stateful address	Uses DHCPv6	0-1	Begins with ff02	DHCPv6 required

T-4-2

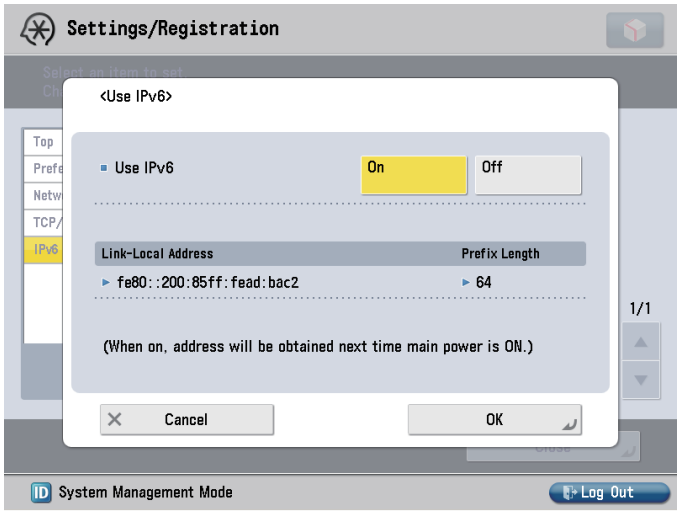
IPv6 address confirmation from a Windows Vista PC

The following instructions pertain to communication confirmation procedures with an IPv6 link local address with a Windows Vista PC and the unit, in a network environment with no DHCPv6 server or router.
On the unit's touch panel, use an IPv6 automatically obtained link local address to confirm the communication status.
From Settings/Registration, go to Preferences > Network > TCP/IP Settings > IPv6 Settings > Use IPv6
Set Use IPv6 to ON.
To change the status from OFF to ON, the unit needs to be rebooted.



F-4-30

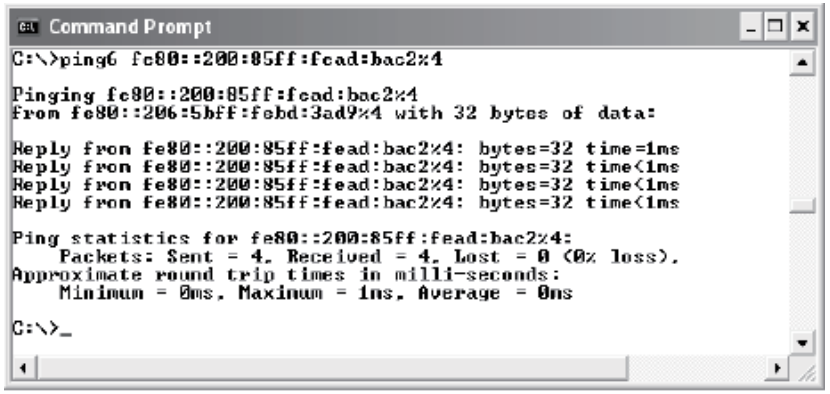
Make a note of the link local address in order to input the address from a Windows Vista PC.
E.g. fe80::200:85ff:fead:bac2



F-4-31

Local area connection confirmation from a Windows Vista PC

From START, go to Control Panel, then Network and Common Centre > Network Connections and Management > Local Area Connections > Properties.
Open the Properties for Internet Protocol Version 6 (TCP/ IP). Select 'Obtain IPv6 Address Automatically' then press OK.
From START, go to All Programmes > Accessories > Command Prompt.
Enter the following command and the IPv6 link local command displayed on the unit touch panel, then press Enter.
At this time, if Ping does not work with only the link local address, enter the Scope ID.
< IPv6address > % <Scope ID >
E.g. fe80::200:85ff:fead:bac2%4
If the unit responds, a connection has been made.



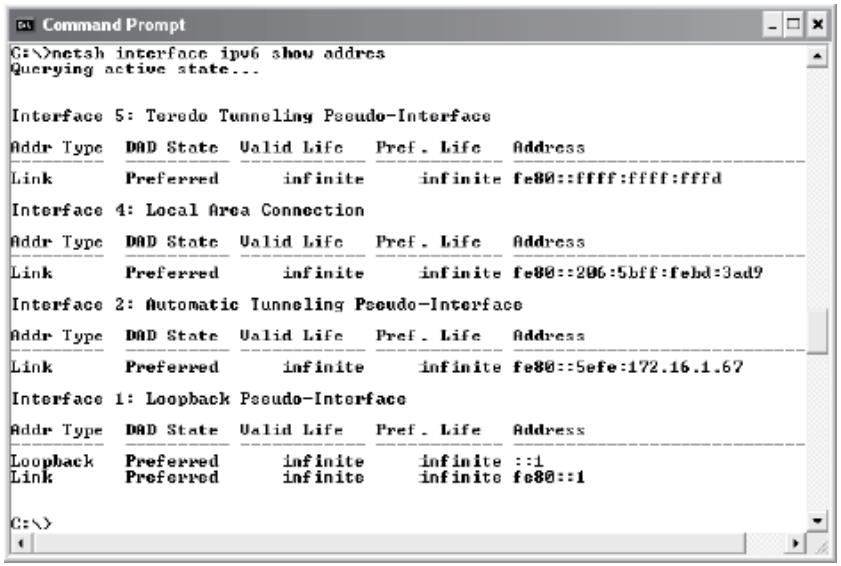
F-4-32

IPv6 connection confirmation from the iR main unit touch panel

Carry out the following procedures in order to check the IP address of a Windows Vista PC.
From START, go to All Programmes > Accessories > Command Prompt.
Enter the following command,

netsh interface ipv6 show address

The display illustrated below will appear.
This is a local network environment with no DHCPv6 server.


Command Prompt
C:\>netsh interface ipv6 show addres
Querying active state...
Interface 5: Teredo Tunneling Pseudo-Interface
Addr Type DAD State Valid Life Pref. Life Address
Link Preferred infinite infinite fe80::ffff:ffff:fffd
Interface 4: Local Area Connection
Addr Type DAD State Valid Life Pref. Life Address
Link Preferred infinite infinite fe80::206:5bff:febd:3ad9
Interface 2: Automatic Tunneling Pseudo-Interface
Addr Type DAD State Valid Life Pref. Life Address
Link Preferred infinite infinite fe80::5efe:172.16.1.67
Interface 1: Loopback Pseudo-Interface
Addr Type DAD State Valid Life Pref. Life Address
Loopback Preferred infinite infinite ::1
Link Preferred infinite infinite fe80::1
C:\>

F-4-33

In the case of the above example,
note down 'fe80::206:5bff:febd:3ad9' , then, from the main unit touch panel,
Settings/Registration > Preferences > Network > TCP/IP Settings > IPv6 Settings > PING Command

Against IPv6 address, enter the IPv6 address of the Windows Vista PC written down earlier, and press Start.
If 'Response from the host' is displayed, a connection has been made.

F-4-34

Reference:

Addresses that begin with "fe80" are called link local addresses.
These are used prior to making trunk LAN and Internet connections.
These addresses are used for single links or connection to single local networks only.
They cannot be relayed via a router.
Multi-cast addresses that begin with "ff02" are for use with DHCPv6 (DHCP IPv6 version).

IPv6 address notation samples:

	Sample	Description
IPv6	1234:0234:0034:0004:0000:0005:00AB:0DE0	128 bits divided into 8 segments of 16 bits in hexadecimal notation.
IPv6 omitted	1234:234:34:4:0:5:AB:DE0	First 0 may be omitted.
IPv6 compact	1234:234:34:4::5:AB:DE0	A compact notation where a series of 0 may be represented by [::], in one location only.

T-4-3

Related Service Modes List

Following is an overview of the service modes related to the SEND function.

There are Service modes Level 1 and 2.

Service modes Level 1

COPIER>OPTION>FNC-SW

Item	Setting name	Description
iR Model Paper Size	MODEL-SZ	0: AB, 1: Inch, 2: A, 3: AB/Inch
Destination(Country+Language +Destination+Size)	CONFIG	JIS X 0304(Two characters)+ISO 639(Two characters)

T-4-4

COPIER>OPTION>NETWORK

Item	Setting name	Description
FTP transmission port number	FTPTXPN	TCP port number used by FTP transmission (default:25)

T-4-5

COPIER>OPTION>USER

Item	Setting name	Description
Disable e-Mail	MAIL-OF	Transmission of e-mail may be disabled by preventing input of e-mail addresses from an address book. 0: enable e-mail transmission (default) 1: disable e-mail transmission If an e-mail address has been registered and yet the setting needs to be changed from '0' to '1', it is desirable to delete the address manually.
Disable File	FILE-OF	Switch for prohibiting transmission to file destinations 0: Transmission to file destinations is not prohibited. 1: Transmission to file destinations is prohibited. File addresses which are already registered must be deleted manually since it is still possible to use them even when '1' is set for this item.
Disable iFax	IFAX-OF	Switch for prohibiting transmission to i-FAX destinations 0: Transmission to i-FAX destinations is not prohibited. 1: Transmission to i-FAX destinations is prohibited. Prohibit transmission of i-FAX destinations by prohibiting the input of i-FAX addresses from the address book.
Delete a From Address When Transmitting e-Mail	FROM-OF	0: do not delete 1: delete

T-4-6

Service modes Level 2

COPIER>OPTION>FNC-SW

Item	Setting name	Description
I-Fax reception raw data print	RAW-DATA	0: Ordinary reception mode(default) 1: Received I-Fax content printed out as is (in order to judge whether data are correct).
PDF Reception/Transmission	PDF-RDCT	0: compute PDF file CropBox to 2 decimal places 1: do not compute PDF file CropBox beyond decimal point

T-4-7

COPIER>OPTION>USER

Item	Setting name	Description
Item Setting name Description No limitation on file size for I-Fax serverless transmission.	IFAX-SZL	0: Enables Limitation on file size for serverless transmission. 1: Disables Limitation on file size for serverless transmission. (Default:1)
Divided page transmission in I-Fax simple mode	IFAX-PGD	0: Does not allow divided page transmission in I-Fax simple mode 1: Allows divided page transmission in I-Fax simple mode (Default:0)
Add the Domain Name for e-Mail Transmission	DOM-ADD	0: do not add 1: add

T-4-8

COPIER>OPTION>NETWORK

Item	Setting name	Description
I-Fax reception output line count limit	IFAX-LIM	When large volume data (error mail, etc.) are received via I-Fax, the output line count is restricted (default: 500). NB: If the setting is 0, there is no restriction.
SMTP transmission port number	SMTPTXPN	TCP port number used by SMTP transmission (default:25)
SMTP reception port number	SMTPRXPN	TCP port number used by SMTP reception (default:25)
POP3 port number	POP3PN	TCP port number used by POP (default:110)
FTP transmission port number	FTPTXPN	TCP port number used by FTP transmission (default:25)
CRAM-MD5 authentication restrictions with SMTP / POP AUTH authentication	NS-CMD5	0: Permit CRAM-MD5 authentication when performing SMTP / POP AUTH authentication. (Default) 1: Prohibit CRAM-MD5 authentication when performing SMTP authentication.
NTLM authentication restrictions with SMTP / POP AUTH authentication	NS-NTLM	0: Permit NTLM authentication when performing SMTP / POP AUTH authentication. (Default) 1: Prohibit NTLM authentication when performing SMTP / POP AUTH authentication.
GSSAPI authentication restrictions with SMTP / POP AUTH authentication	NS-GSAPI	0: Permit GSSAPI authentication when performing SMTP POP AUTH authentication. (Default) 1: Prohibit GSSAPI authentication when performing SMTP POP AUTH authentication.
PLAIN, LOGIN authentication restrictions with SMTP POP AUTH authentication when communication packets are encoded	NS-PLNWS	When communication packets are encoded, 0: Permit PLAIN, LOGIN authentication when performing SMTP POP AUTH authentication. (Default) 1: Prohibit PLAIN, LOGIN authentication when performing SMTP POP AUTH authentication.
LOGIN authentication restrictions with SMTP POP AUTH authentication	NS-LGN	0: Permit LOGIN authentication when performing SMTP POP AUTH authentication. (Default) 1: Prohibit LOGIN authentication when performing SMTP POP AUTH authentication.
PLAIN, LOGIN authentication restrictions with SMTP POP AUTH authentication when communication packets are not encoded	NS-PLN	When communication packets are not encoded, 0: Permit PLAIN, LOGIN authentication when performing SMTP POP AUTH authentication. (Default) 1: Prohibit PLAIN, LOGIN authentication when performing SMTP POP AUTH authentication.

T-4-9

NOTE
With regard to the new SMTP authentication-related user modes, usually there is no need to change these settings. These settings should be changed only when a particular authentication system is to be prohibited, depending on the server administrator's security policy.

Service mode comparative table

Mention below a list for old BODY of the Send function in this Model.

Item	New	Setting name	Old	Setting name	Description
MODEL-SZ	1	FNC-SW > MDEL-SZ	2	MODEL-SZ	0: AB, 1: Inch, 2: A, 3: AB/ Inch
Destination(Country+ Language+Destination+Size)	1	FNC-SW > CONFIG	2	CONFIG	JIS X 0304(Two characters)+ISO 639(Two characters)
I-Fax reception raw data print	2	FNC-SW > RAW-DATA	2	RAW-DATA	0: Ordinary reception mode(default) 1: Received I-Fax content printed out as is (in order to judge whether data are correct).
I-Fax reception output line count limit	2	NETWORK > IFAX-LIM	2	IFAX-LIM	When large volume data (error mail, etc.) are received via I-Fax, the output line count is restricted (default: 500). NB: If the setting is 0, there is no restriction.
SMTP transmission port number	2	NETWORK > SMTPTXPN	2	SMTPTXPN	TCP port number used by SMTP transmission (default:25)
SMTP reception port number	2	NETWORK > SMTPRXPN	2	SMTPRXPN	TCP port number used by SMTP reception (default:25)
POP3 port number	2	NETWORK > POP3PN	2	POP3PN	TCP port number used by POP (default:110)
FTP transmission port number	1	NETWORK > FTPTXPN	2	FTPTXPN	TCP port number used by FTP transmission (default:25)
CRAM-MD5 authentication restrictions with SMTP / POP AUTH authentication	2	NETWORK > NS-CMD5	2	NS-CMD5	0: Permit CRAM-MD5 authentication when performing SMTP / POP AUTH authentication. (Default) 1: Prohibit CRAM-MD5 authentication when performing SMTP authentication.
NTLM authentication restrictions with SMTP / POP AUTH authentication	2	NETWORK > NS-NTLM	2	NS-NTLM	0: Permit NTLM authentication when performing SMTP / POP AUTH authentication. (Default) 1: Prohibit NTLM authentication when performing SMTP / POP AUTH authentication.
GSSAPI authentication restrictions with SMTP / POP AUTH authentication	2	NETWORK > NS-GSAPI	2	NS-GSAPI	0: Permit GSSAPI authentication when performing SMTP POP AUTH authentication. (Default) 1: Prohibit GSSAPI authentication when performing SMTP POP AUTH authentication.
PLAIN, LOGIN authentication restrictions with SMTP POP AUTH authentication when communication packets are encoded	2	NETWORK > PLNWS	2	NS-PLNWS	When communication packets are encoded, 0: Permit PLAIN, LOGIN authentication when performing SMTP POP AUTH authentication. (Default) 1: Prohibit PLAIN, LOGIN authentication when performing SMTP POP AUTH authentication.
LOGIN authentication restrictions with SMTP POP AUTH authentication	2	NETWORK > NS-LGN	2	NS-LGN	0: Permit LOGIN authentication when performing SMTP POP AUTH authentication. (Default) 1: Prohibit LOGIN authentication when performing SMTP POP AUTH authentication.

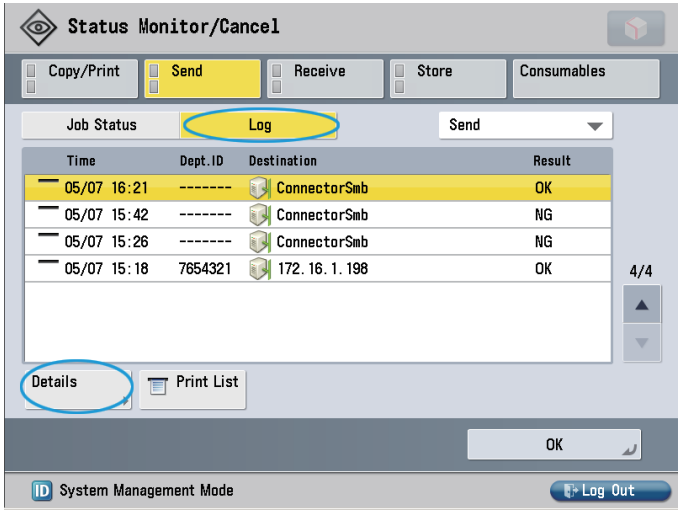
Item	New	Setting name	Old	Setting name	Description
PLAIN, LOGIN authentication restrictions with SMTP POP AUTH authentication when communication packets are not encoded	2	NETWORK > NS-PLN	2	NS-PLN	When communication packets are not encoded, 0: Permit PLAIN, LOGIN authentication when performing SMTP POP AUTH authentication. (Default) 1: Prohibit PLAIN, LOGIN authentication when performing SMTP POP AUTH authentication.
Disable e-Mail	1	USER > MAIL-OF	2	MAIL-OF	Transmission of e-mail may be disabled by preventing input of e-mail addresses from an address book. 0: enable e-mail transmission (default) 1: disable e-mail transmission If an e-mail address has been registered and yet the setting needs to be changed from '0' to '1', it is desirable to delete the address manually.
Delete a From Address When Transmitting e-Mail	1	USER > FROM-OF	2	FROM-OF	0: do not delete 1: delete
Add the Domain Name for e-Mail Transmission	2	USER > DOM-ADD	2	DOM-ADD	0: do not add 1: add
PDF Reception/ Transmission	2	FNC-SW > PDF-RDCT	2	PDF-RDCT	0: compute PDF file CropBox to 2 decimal places 1: do not compute PDF file CropBox beyond decimal point

T-4-10

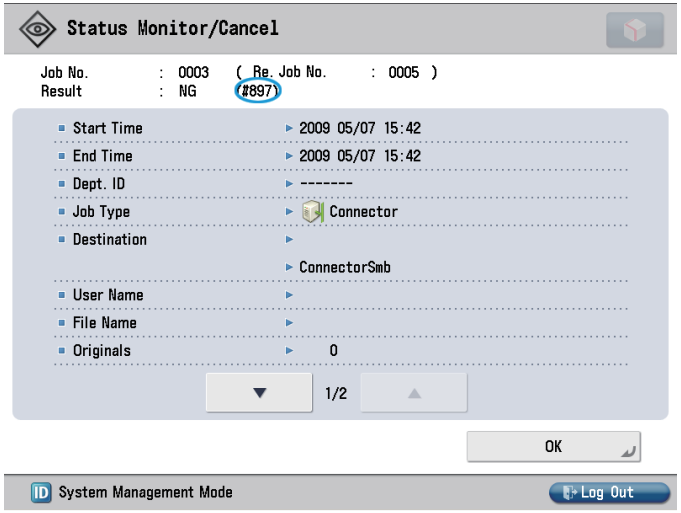
Related Error code

Confirm method of error code

The error code is displayed in the touch panel by the figure of # XXX.
There is an error message list in the user guide.
The corresponding content of the error is confirmed.



F-4-35



F-4-36

E-mail Transmission errors

<E-mail transmission error message and error codes>

Message	Error code	Cause	Remedy
No message	#022	Address deleted or invalidated during transmission reservation.	• Retransmit deleted address. • Check that a group address is specified as the transfer destination and that it contains a valid address. • Check that a group address is specified as the transfer destination and whether it contains local print or fax box only. • Check whether the specified transfer destination address has been deleted.
Transmission cancelled	#099	A user canceled the transmission.	Check Address Book. If the error insists, turn the power off and on.
The number of transmission standby documents must be reduced.	#702	HD full (work area)	• Wait a while then retry. • Stop broadcast transmission with other protocols. This sometimes helps to avoid this problem.
The number of transmission standby documents and BOX documents must be reduced.	#703	HD full (work area)	• Wait a while then retry. • Delete documents from the BOX to free up HD space. 2GB file size restrictions of the PDF make you transmit a short manuscript. In addition, there is the case that you can transmit normally when even a case except the above is going to transmit a message in Portable Document Format when you set it in file format except the PDF again.
The address is not in the address list.	#704	Address book search error.	Check the address book settings.
Data size too big.	#705	Transmission data size too big.	• Reduce number of pages for transmission or lower resolution. • Reset user mode transmission upper limit.
Address table not available.	#706	Address book locked.	• Address book cannot be referenced as it is being used by remote UI. • Address book cannot be referenced as it is being used by other transmission components.
URL sending error	#713	The document stored in Mail Box has been deleted before the URL transmission.	• Do not delete the document in Mail Box. • Send the document again.
No connection	#752	DNS/SMTP server setting error (SMTP connection error)	Reprogramme the user mode settings. (domain name, E-Mail address, DNS, mail server)
No response	#753	Network error(Socket Write,Selecterror, etc.)	Check cable and connectors.
Check TCP/IP	#755	- IP address set to 0.0.0.0. In the following two situations, the IP address is 0.0.0.0. 1) Address could not be obtained from DHCP, BOOTP, RARP. 2) Unit launched in IP fixed mode(keys 1+7 to enter FIXIPmode). - TCP/IP protocol stack resources insufficient. Even with internal retry (5 times), transmission failed.	• Set the IP address correctly or set DHCP, RARP, BOOTP environments to operate properly. • Turn power OFF/ON.
Check server	#801	SMTP protocol error/ command timeout	• Check mail server • Check the network traffic.
Cannot find server	#802	DNS/SMTP setting error(DNS error)	Reprogramme the user mode settings. (domain name, E-Mail address, DNS, mail server)
Check address	#806	Incorrect address (address wrongly searched on SMTP protocol)	Check address
POP server connection error	#810	Cannot connect to POP server when attempting POP Before SMTP transmission.	• Reprogramme user mode settings (POP, DNS server name) • Check POP server operation. • Check DNS server operation.
POP server address error	#813	Password, user account error when attempting POP Before SMTP transmission.	• Check POP user name, password. • Check POP server account.

Message	Error code	Cause	Remedy
No display	#830	DSN error notification received. The DSN error notification is sent to the transmission source by the SMTP server and the iR machine programmed for SMTP reception during an ESMTP-enabled transfer path whenever the destination address and the other party's conditions settings are wrong, or when the transmitted document's data size exceeds the permitted SMTP server range.	• Check the destination address. • Set the transmission data size so that it does not exceed the SMTP server's limit. • Programme the transmission other party's conditions so that they can be processed by the receiver.
No display	#834	MDN error notification received. The MDN error notification is sent to the transmission source as a transmission result in the mail header when the final processing of a mail sent in I-Fax Full mode fails in the iR reception machine.	• Programme the transmission other party conditions so that they can be processed by the receiver. • Check that the receiver memory is not full. • Correct the cause of reception image decoding failure.
SMTP server authentication error	#839	Error occurred with password, user name and/or account when attempting SMTP AUTH transmission.	• Check SMTP authentication user name, password. • Check SMTP server account.
SSL encoding error	#841	Because there is no encoding algorithm in common with the mail server, error occurred when attempting SSL encoded transmission.	• Stop SSL encoded transmission. • Change mail server settings and add encoding algorithm.
SSL encoding error	#842	The mail server has requested client authentication, which is an unsupported function, and an error was generated when SSL transmission was attempted.	• Change the mail server settings so that client authentication is not requested. • Stop using SSL encoded transmissions.
SMTP authentication error	#843	In SMTP authentication using GSSAPI, there is a significant difference (more than 5 minutes) in the time set in the KDC (Key DistributionCenter) server and that set in the iR, causing SMTP authentication, using GSSAPI, to fail.	• Correct the time settings on the machine. • Check the time zone and summer time settings. • Correct the KDC server time settings.
SSL encoding error(POP)	#844	In a transmission using POP Before SMTP, the device attempted SSL encryption communications but an error occurred in the communications and failed in POP authentication.	• Check the settings for encrypted SSL communications in the POP server. • Turn Allow SSL (POP) option off in Additional Functions not to use SSL encryption function for communications with the POP server. • Turn POP Authentication before Sending option off not to use POP Before SMTP.
POP AUTH authentication error	#845	In an email or I-Fax transmission using POP Before SMTP, the device attempted POP Auth but an error occurred in the POP server and failed in POP authentication.	• Check POP Address and POP Password settings of Additional Functions. • Check the POP authentication settings in the POP server. • Cancel the selection of POP AUTH for POP AUTH Method. • Turn POP Authentication before Sending option off not to use POP Before SMTP.
APOP authentication error	#846	In an email or I-Fax transmission using POP Before SMTP, the device attempted APOP of POP authentication but an error occurred in the APOP authentication and failed in POP authentication.	• Check POP Address and POP Password settings of Additional Functions. • Check the APOP settings in the POP server. • Cancel the selection of APOP for POP AUTH Method. • Turn POP Authentication before Sending option off not to use POP Before SMTP.
No display	#899	Operation completed normally.	This error code indicates that transmission as far as the SMTP server was completed normally, but delivery cannot be confirmed. Except when delivery confirmation is performed in I-Fax Full mode, confirmation is displayed on the I-Fax/E-Mail transmission side. The only way to judge whether transmission has been completed normally is to see whether there has been an error mail reception printout.
Cancelled.	#995	Transmission cancelled	-Retransmit as necessary.

Message	Error code	Cause	Remedy
Archive log is full	#856	In the case of using job archive function, the disk of the archive storage is full, causing the send/receive job error.	Retrieve the archive log to the server.
e-Signature Certificate Access Error	#761	The encryption code used at time of PDF transmission (bearing a user signature prepared by MEAP authentication) prevents transmission.	Install the appropriate user certificate or machine certificate properly.
Check to see if the address is correct.	#762	e-mail is sent to an address for which transmission is not permitted.	Check to see if the target of transmission is correct. Check to see if the domain (in user mode) is one for which transmission is permitted. Do not transmit to an address for which transmission has not been authorized..
e-Certificate Validity error	#766	The period of validity of the certificate used for signature transmission has passed.	Use a certificate whose period of validity is still good. If necessary, set the time correctly.
Count Limit for SEND Trial (no message)	#769	The count has reached its limit at time of a SEND trail session. (At time of reception, the counter reading reaches the upper limit, causing an error when transfer occurs.)	After the maximum number of SEND trial sessions has been exceeded, an attempt has been made for SEND transmission.
	#772	The connection error of Adobe Life Cycle Rights Management server	Check the connection of server
	#773	Exclusive setting error of choosing PDF	Check the optional setting of PDF

T-4-11

MEMO
This model does not have an E-Mail reception function, only an error mail reception function. Therefore, it can only print out text and i-Fax compliant TIFF attachments. PDF and JPEG files cannot be printed out.

I-Fax Transmission errors

<I-Fax transmission error message and error codes>

Message	Error code	Cause	Remedy
No display	#022	Address deleted or invalidated during transmission reservation.	• Retransmit deleted address. • Check that a group address is specified as the transfer destination and that it contains a valid address. • Check that a group address is specified as the transfer destination and whether it contains local print or fax box only. • Check whether the specified transfer destination address has been deleted.
No display	#099	A user canceled the transmission.	- Send the data again.
The number of transmission standby documents must be reduced.	#702	HD full (work area)	• Wait a while then retry. • Stop broadcast transmission with other protocols.
The number of transmission standby documents and BOX documents must be reduced.	#703	HD full (work area)	• Wait a while then retry. • Stop broadcast transmission with other protocols. • Delete documents from the BOX to free up HD space.
The address is not in the address list.	#704	Address book search error.	- Check the address book settings.
Data size too big.	#705	Transmission data size too big.	• Reduce number of pages for transmission or lower resolution. • Image data size for one page has exceeded the user mode setting. • Reset user mode transmission upper limit.
Address table not available.	#706	Remote UI or other transmission components using address book, so it cannot be referenced.	-Wait a while then retry.
No connection	#752	DNS/SMTP server setting error (SMTP connection error)	• Reprogramme the user mode settings. (domain name, E-Mail address, DNS, mail server) • Check that the SMTP server is operating properly.
No response	#753	Network error(Socket Write,Selecterror,etc.)	Check cable and connectors.
Check TCP/IP	#755	- IP address set to 0.0.0.0. In the following two situations, the IP address is 0.0.0.0. 1) Address could not be obtained from DHCP, BOOTP, RARP. 2) Unit launched in IP fixed mode(keys 1+7 to enter FIXIPmode). - TCP/IP protocol stack resources insufficient. Even with internal retry (5 times), transmission failed.	• Set the IP address correctly or set DHCP, RARP, BOOTP environments to operate properly. • Turn power OFF/ON.
Check server	#801	Error returned from SMTP server during SMTP session. Or, command timeout error generated.	• Check mail server • Check the network traffic.
Cannot find server	#802	DNS/SMTP setting error(DNS server connection error)	Reprogramme the user mode settings. (domain name, E-Mail address, DNS, mail server)Check that the DNS server is operating normally.
Check address	#806	Address wrongly searched on SMTP protocol.	Check address
POP server connection error	#810	Cannot connect to POP server when attempting POP Before SMTP transmission.	• Reprogramme user mode settings (POP, DNS server name) • Check POP server operation. • Check DNS server operation.
POP server address error	#813	Password, user account error when attempting POP Before SMTP transmission.	• Check POP user name, password. • Check POP server account.
No display	#830	DSN error notification received. The DSN error notification is sent to the transmission source by the SMTP server and the iR machine programmed for SMTP reception during an ESMTP-enabled transfer path whenever the destination address and the other party's conditions settings are wrong, or when the transmitted document's data size exceeds the permitted SMTP server range.	- Check the destination address. - Set the transmission data size so that it does not exceed the SMTP server's limit. - Programme the transmission other party's conditions so that they can be processed by the receiver.

Message	Error code	Cause	Remedy
No display	#834	MDN error notification received. The MDN error notification is sent to the transmission source as a transmission result in the mail header when the final processing of a mail sent in I-Fax Full mode fails in the iR reception machine.	• Programme the transmission other party conditions so that they can be processed by the receiver. • Check that the receiver memory is not full. • Correct the cause of reception image decoding failure.
SMTP server authentication error	#839	Error occurred with password, user name and/ or account when attempting SMTP AUTH transmission.	• Check SMTP authentication user name, password. • Check SMTP server account.
SSL error(SMTP Send)	#841	Because there is no encoding algorithm in common with the mail server, error occurred when attempting SSL encoded transmission.	• Stop SSL encoded transmission. • Change mail server settings and add encoding algorithm.
SSL error(SMTP Send)	#842	The mail server has requested client authentication, which is an unsupported function, and an error was generated when SSL transmission was attempted.	• Change the mail server settings so that client authentication is not requested. • Stop using SSL encoded transmissions.
SMTP authentication error	#843	In SMTP authentication using GSSAPI, there is a significant difference (more than 5 minutes) in the time set in the KDC (Key DistributionCenter) server and that set in the iR, causing SMTP authentication, using GSSAPI, to fail.	• Correct the time settings on the machine. • Check the time zone and summer time settings. • Correct the KDC server time settings.
SSL error(POP)	#844	In a transmission using POP Before SMTP, the device attempted SSL encryption communications but an error occurred in the communications and failed in POP authentication.	• Check the settings for encrypted SSL communications in the POP server. • Turn Allow SSL (POP) option off in Additional Functions not to use SSL encryption function for communications with the POP server. - Turn POP Authentication before Sending option off not to use POP Before SMTP.
POP AUTH encryption error	#845	In an email or I-Fax transmission using POP Before SMTP, the device attempted POP Auth but an error occurred in the POP server and failed in POP authentication.	• Check POP Address and POP Password settings of Additional Functions. • Check the POP authentication settings in the POP server. • Cancel the selection of POP AUTH for POP AUTH Method. • Turn POP Authentication before Sending option off not to use POP Before SMTP.
APOP encryption error	#846	In an email or I-Fax transmission using POP Before SMTP, the device attempted APOP of POP authentication but an error occurred in the APOP authentication and failed in POP authentication.	• Check POP Address and POP Password settings of Additional Functions. • Check the APOP settings in the POP server. • Cancel the selection of APOP for POP AUTH Method. • Turn POP Authentication before Sending option off not to use POP Before SMTP.
No display	#899	Operation completed normally.	This error code indicates that transmission as far as the SMTP server was completed normally, but delivery cannot be confirmed. Except when delivery confirmation is performed in I-Fax Full mode, confirmation is displayed on the I-Fax/E-Mail transmission side. The only way to judge whether transmission has been completed normally is to see whether there has been an error mail reception printout.
Archive log is full	#856	In the case of using job archive function, the disk of the archive storage is full, causing the send/receive job error.	Retrieve the archive log to the server.
Check to see if the address is correct.	#762	e-mail is sent to an address for which transmission is not permitted.	• Check to see if the target of transmission is correct. • Check to see if the domain (in user mode) is one for which transmission is permitted. • Do not transmit to an address for which transmission has not been authorized..
Cancelled.	#995	Transmission cancelled	Retransmit as necessary.

T-4-12

I-Fax Reception errors

<I-Fax reception error message and error code list>

Message	Error code	Cause	Remedy
POP server UIDL error		POP server UIDL commands not supported	Change POP server.
POP server address error		POP server error (account)	• Reprogramme user mode settings (account). • Check POP server account.
POP server address error		POP server error (password)	• Reprogramme user mode settings (password). • Check POP server account.
POP server connection error		Cannot connect to POP server.	• Reprogramme user mode settings (POP, DNS server name) • Check POP server operation. • Check DNS server operation.
Check TCP/IP.		Incorrect IP address.	• Reprogramme IP address and turn power OFF/ON. • Check DHCP, RARP, BOOTP server operations and turn power OFF/ON.
Connect cable.		SMTP initialisation error	• Check network and network card. • Turn power OFF/ON.
No response		Mail server error	Check mail server operation.
Cannot receive		Reception refused	• Clear any operator call error, such as no paper, etc. • Receive reception JOBs into memory reception BOX. • Delete transmitting JOBs.
SSL Error (SMTP Receive)		Error in encrypting SSL to receive in SMTP	Mismatched SSL algorithm. Check the server certificate and the settings in the SSL client.
SSL Error (SMTP RX Reject)		The option that allows only SSL communications is selected.	• Change Allow SSL (SMTP Receive) setting from SSL to On or Off in Additional Functions. • Change the settings to use SSL in the client.
SSL Error (POP)		The device attempted to communicate with the POP server in SSL but an error occurred in SSL encryption communications and failed in POP authentication.	• Check the settings for encrypted SSL communications in the POP server. • Turn Allow SSL (POP) option off in Additional Functions not to use SSL encryption function for communications with the POP server.
POP AUTH Encryption Error		The device attempted POP Auth but an error occurred in the POP server and failed in POP authentication.	• Check POP Address and POP Password settings of Additional Functions. • Check the POP authentication settings in the POP server. • Cancel the selection of POP AUTH for POP AUTH Method.
APOP Authentication Error		The device attempted APOP of POP authentication but an error occurred in the APOP authentication and failed in POP authentication.	• Check POP Address and POP Password settings of Additional Functions. • Check the APOP settings in the POP server. • Cancel the selection of APOP for POP AUTH Method.
The number of transmission standby documents must be reduced.	#702	HD full(work area)	Stop all jobs operating simultaneously. Or, wait a while until the HD area is freed up.
The number of transmission standby documents and BOX documents must be reduced.	#703	HD full(work area)	Delete documents from the BOX to free up HD space and decrease number of transmission standby documents in the BOX.
Check server	#801	Timeout (1KByte/ 10 sec.) during SMTP data reception.	• Check SMTP server operation. • Check network traffic conditions.
Cannot find server	#802	DNS/SMTP setting error(DNS error)	Reprogramme the user mode settings. (domain name, E-Mail address, DNS, mail server)
POP server connection error	#810	Timeout (1KByte/ 10 sec.) during POP data reception.	• Check user mode POP server settings. • Check POP server operation. • Check network traffic conditions.
No message. Error reason given on reception error report.	#818	File attachment is in unprintable format.	Contact sender and arrange for them not to transmit image data that is not supported by I-Fax.
No message. Error reason given on reception error report.	#819	MIME information error	Nothing in particular.Contact the sender and have them output the error information and error dump.
No message. Error reason given on reception error report.	#820	BASE64 or uuencode error	Nothing in particular.Contact the sender and have them output the error information and error dump.
No message. Error reason given on reception error report.	#821	TIFF analysis error	Nothing in particular.Contact the sender and have them output the error information and error dump.
No message. Error reason given on reception error report.	#822	Image decode error	Nothing in particular.Contact the sender and have them output the error information and error dump.

Message	Error code	Cause	Remedy
No message. Error reason given on reception error report.	#827	Unsupported MIME	Contact sender and ask them not to transmit data that cannot be received.
No message. Error reason given on reception error report.	#828	HTML format file attachment	Contact sender and ask them not to transmit data that cannot be received.
No message. Error reason given on reception error report.	#829	Reception document exceeds 1000 pages.	Contact the sender and have them limit the number of pages in a single transmission to 999.
No message.	#831	SMTP connection cut by IP block function.	Reprogramme the IP address of the IP block function that allows SMTP connection.
No message.	#832	Problem with receiving unit's transmission settings. DSN transmission failed.	• Check the SMTP/DNS server, domain name, host name, E-Mail address, IP address, netmask and default gateway settings in user mode. • Check mail server/ DNS server operation.
No message.	#833	Problem with receiving unit's transmission settings. MDN transmission failed.	• Check the SMTP/DNS server, domain name, host name, E-Mail address, IP address, netmask and default gateway settings in user mode. • Check mail server/ DNS server operation.
No message.	#835	Text reception line count error.	- Have the sender reduce the number of lines in the text.
No message.	#838	SEND license of MEAP function became invalid. The connection of I FAX SMTP reception function was broken. (Only the machine for MEAP)	Purchase of license of SEND function
No message.	#848	Receive Divided (Datamessage/partial)merge error	• The mail of Receive Divided Data BOX is not deleted. • The time-out time is reviewed. • Retransmission is requested to those who transmit.
No message.	#99	It deleted it without printing Receive Divided Data by the user operation.	

T-4-13

SMB Transmission errors

<SMB transmission error message and error code list>

Message	Error code	Cause	Remedy
No message	#022	Address deleted or invalidated during transmission reservation.	• Retransmit deleted address. • Check that a group address is specified as the transfer destination and that it contains a valid address. • Check that a group address is specified as the transfer destination and whether it contains local print or fax box only. • Check whether the specified transfer destination address has been deleted.
Transmission cancelled	#099/ #995	Transmission cancelled by user.	Resend.
Address does not appear in address list.	#704	An error occurred when address information was being obtained from the address list. (Address deleted from list after scanning, etc.)	Check address list settings. Or, turn unit OFF/ON.
HD full	#702	Operation stopped because HD full (work area).	• Wait a while then retry. • Stop broadcast transmission with other protocols. This sometimes helps to avoid this problem.
HD full	#703	Operation stopped because HD full (image area).	• Wait a while then retry. • Stop broadcast transmission with other protocols. This sometimes helps to avoid this problem. 2GB file size restrictions of the PDF make you transmit a short manuscript. In addition, there is the case that you can transmit normally when even a case except the above is going to transmit a message in Portable Document Format when you set it in file format except the PDF again.
Address table not available	#706	• Address table being imported/ exported from RUI. • Address book usage doubled up with other transmission component (Fax, etc.).	• Quit access from RUI. • Wait a while and then retry
No response	#751	• Server has not booted up. • Network disconnected. (If connection cannot be made with transmission destination, connection is sometimes cut mid-way.) • Reset caused by internal error. Processing interrupted.	• Check transmission destination and network settings. • Transmission jobs whose processing has stopped for some reason or other are forced to quit by assigning an internal error code (#751). As a result, after rebooting, the job is not run.
TCP/IP error	#755	• IP address set to 0.0.0.0. In the following two situations, the IP address is 0.0.0.0. • 1) Address could not be obtained from DHCP, BOOTP, RARP. • 2) Unit launched in IP fixed mode(keys 1+7 to enter FIXIPmode). • TCP/IP protocol stack resources insufficient. Even with internal retry (5 times),transmission failed.	• Set the IP address correctly or set DHCP, RARP, BOOTP environments to operate properly. • Turn power OFF/ON.
e-Signature Certificate Access Errore-Signature Certificate Access Error	#761	The encryption code used at time of PDF transmission (bearing a user signature prepared by MEAP authentication) prevents transmission.	Install the appropriate user certificate or machine certificate properly.
Check to see if the address is correct.	#762	e-mail is sent to an address for which transmission is not permitted.	Check to see if the target of transmission is correct. Check to see if the domain (in user mode) is one for which transmission is permitted. Do not transmit to an address for which transmission has not been authorized..

Message	Error code	Cause	Remedy
e-Certificate Validity error	#766	The period of validity of the certificate used for signature transmission has passed.	Use a certificate whose period of validity is still good. If necessary, set the time correctly.
Check server	#801	• Error generated due to cause on server side. • SMB server side file capacity not sufficient. • In WindowsNT/2000 server, password was incorrect. • In WindowsNT SMB, common file name did not match. • In SMB, a user exists but no write privileges. • SMB transmission made to write-prohibited file of the same name.	• Reset server. • Check server status and settings. • Check the network traffic.
Cannot find server	#802	DNS/SMTP setting error(DNS error)	Reprogramme the user mode settings. (domain name, E-Mail address, DNS, mail server)
Check address	#804	• -No match for specified directory name. • In SMB, a user exists but no write privileges.	• Check that the destination directory name is correct. • Set directory access privileges in the server.
Disk full on the Server	#805		-Document deletion of server
Check address.	#806	• Wrongly specified user name. • Wrongly specified password. (Excl. Windows NT.)	Change address book user name or password.
No messag	#807	No access rights for the specified directory	Check the access rights to the server.
It is generated the error by the cause of the servers end.	#808		The server is reset.
There is already files of this name. The Over write prohibition is set.	#809		It sets it to possible Over write on server.
	#772	The connection error of Adobe Life Cycle Rights Management server	Check the connection of server
	#773	Exclusive setting error of choosing PDF	Check the optional setting of PDF

T-4-14

FTP Transmission errors

<FTP transmission error message and error code list>

Message	Error code	Cause	Remedy
No message	#022	Address deleted or invalidated during transmission reservation.	• Retransmit deleted address. • Check that a group address is specified as the transfer destination and that it contains a valid address. • Check that a group address is specified as the transfer destination and whether it contains local print or fax box only. • Check whether the specified transfer destination address has been deleted.
Transmission cancelled	#099/ #995	Transmission cancelled by user.	Resend.
HD full	#702	Operation stopped because HD full (work area).	• Wait a while then retry. Stop broadcast transmission with other protocols. This sometimes helps to avoid this problem.
HD ful	#703	Operation stopped because HD full (image area).	• Wait a while then retry. Stop broadcast transmission with other protocols. This sometimes helps to avoid this problem. 2GB file size restrictions of the PDF make you transmit a short manuscript. In addition, there is the case that you can transmit normally when even a case except the above is going to transmit a message in Portable Document Format when you set it in file format except the PDF again.
Address does not appear in address list.	#704	An error occurred when address information was being obtained from the address list. (Address deleted from list after scanning, etc.)	• Check address list settings. Or, turn unit OFF/ON.
Address table not available	#706	• Address table being imported/ exported from RUI. • Address book usage doubled up with other transmission component (Fax, etc.).	• Quit access from RUI. • Wait a while and then retry
No response	#751	• Server has not booted up. • Network disconnected. (If connection cannot be made with transmission destination, connection is sometimes cut mid-way.) • No Tree name entered. • Reset caused by internal error. Processing interrupted.	• Check transmission destination and network settings. • Enter Tree name. • Transmission jobs whose processing has stopped for some reason or other are forced to quit by assigning an internal error code (#751). As a result, after rebooting, the job is not run.
TCP/IP error	#755	• IP address set to 0.0.0.0. In the following two situations, the IP address is 0.0.0.0. 1) Address could not be obtained from DHCP, BOOTP, RARP. 2) Unit launched in IP fixed mode(keys 1+7 to enter FIXIPmode). • TCP/IP protocol stack resources insufficient. Even with internal retry (5 times), transmission failed.	- Set the IP address correctly or set DHCP, RARP, BOOTP environments to operate properly. - Turn power OFF/ON.
e-Signature Certificate Access Error	#761	The encryption code used at time of PDF transmission (bearing a user signature prepared by MEAP authentication) prevents transmission.	Install the appropriate user certificate or machine certificate properly.
Check to see if the address is correct.	#762	e-mail is sent to an address for which transmission is not permitted.	Check to see if the target of transmission is correct. Check to see if the domain (in user mode) is one for which transmission is permitted. Do not transmit to an address for which transmission has not been authorized..

Message	Error code	Cause	Remedy
e-Certificate Validity error	#766	The period of validity of the certificate used for signature transmission has passed.	Use a certificate whose period of validity is still good. If necessary, set the time correctly.
Check server	#801	• Error generated due to cause on server side. • In NetWare,a user exists but no read or write privileges. • Transmission made to write-prohibited file of the same name.	• Reset server. • Check server status and settings. • Check the network traffic.
Cannot find server	#802	• The IP address for DNS server is not set up. • DNS Server is not running. • No appropriate host name is found in the DNS server.	• Check the DNS server.
Check address	#804	• No match for specified directory name. • No access privileges for that directory.	• Check that the destination directory name is correct. • Set directory access privileges in the server. • Send to different directory with access privileges.
Disk full on the Server	#805		Document deletion of server
Check address.	#806	• Wrongly specified user name. • Wrongly specified password. • In NetWare, the host name is incorrect.	-Change address book user name or password.
No message	#807	No access rights for the specified directory	Check the access rights to the server.
It is generated the error by the cause of the servers end.	#808		The server is reset.
No connection	#815	Login is made from this unit in NetWare's Pserver mode (NDS/ Bindery common) and login is attempted again for NCP, while the server is printing.	• Wait a while and try again. • Change the destination NetWare server. • Stop Pserver.
	#772	The connection error of Adobe Life Cycle Rights Management server	Check the connection of server
	#773	Exclusive setting error of choosing PDF	Check the optional setting of PDF

T-4-15

Box Transmission errors

<BOX transmission error message and error code list>

Message	Error code	Cause	Remedy
No message	#022	Address deleted or invalidated during transmission reservation.	• Retransmit deleted address. • Check that a group address is specified as the transfer destination and that it contains a valid address. • Check that a group address is specified as the transfer destination and whether it contains local print or fax box only. • Check whether the specified transfer destination address has been deleted.
Transmission cancelled	#099	- Transmission cancelled by user.	Resend.
Address table not available.	#706	- Address book locked.	• It is not possible to refer because RUI is using Address book. It is not possible to refer because Other Transmississon component is using Address book.
No message	#711	Full in memory for User Inboxes	Delete stored documents in Mail Boxes.
No message	#712	The number of documents for a box reaches to the maximum	Delete stored documents in Mail Box that contains the maximum number of documents.

T-4-16

WebDAV Transmission errors

Message	Error code	Cause	Remedy
The address is not listed in the address book	#022	An error occurred when obtaining address information from the address book. In the case of deleting the address from the address book after the scan	Check the settings of the address book. If this does not work, turn off and then, on the power
HDD is full	#703	There is no available space in HD when processing image conversion, causing the image processing failed.	Leave it for a while, and then, try to send again. It may be possible to avoid this symptom by not using other protocols at sending. 2GB file size restrictions of the PDF make you transmit a short manuscript. In addition, there is the case that you can transmit normally when even a case except the above is going to transmit a message in Portable Document Format when you set it in file format except the PDF again.
The address book cannot be used	#706	During importing/exporting address book from RUI, other transmission component used the same address book.	Leave it for a while, and then, try to send again.
There is no response	#751	-Network is down (2 possibilities: in the case of disabled transmission, in the case that the communication is interrupted in the middle of the transmission) -Server is not startup -Server is lost -Wrong host name of the address	Check the address and the network
TCP/IP error	#755	When the IP address on SRAM is 0.0.0.0, the IP address is determined as 0.0.0.0 by the following 2 cases: 1. Obtaining address failed because of DHCP, BOOTP, and RARP. 2. It startup in IP fixed mode. In the case that the transmission failed even by the 5 times of internal retry due to the resource shortage of the TCP/IP protocol.	Make settings of the IP address
SSL Error	#770	The WebDAV server does not support SSL.	Check the server settings.
Archive log is full	#856	In the case of using job archive function, the disk of the archive storage is full, causing the send/receive job error.	Retrieve the archive log to the server.
Transmission has failed.	#870	The HTTP response is 403 (forbidden). The execution of the method is prohibited by the server because of any of the following: 1. No right to access has been granted. The server settings prevent access from outside to the target file itself or to the directory as a whole. 2. There is much traffic to the server.	Wait a while, and then try again. Check the server settings.
Check the server.	#868	The HTTP response is 305 (Use Proxy). The WebDAV server is requesting access by way of a proxy.	In user mode, check the proxy settings.
Check the address.	#869	The HTTP response is 401 (Unauthorized). Authentication with the WebDAV server has failed.	Check the user name and password of the address.

Message	Error code	Cause	Remedy
Check the address.	#871	The HTTP response is 404 (Not Found). The server could not find the appropriate resource. It usually occurs when the server wants to reject the request without indicating the reason or when there is no appropriate response. The HTTP response is 409 (Conflict). The request is illogical, not permitting completion. The HTTP response is 410 (Gone). The requested resource is no longer available on the server, and there is no appropriate address for forwarding.	Check the address.
Check the server.	#872	The HTTP response is 405 (Method Not Allowed). The resource indicated in the URI does not permit the use of the method.	Check the server settings.
	#873	The HTTP response is 407 (Proxy Authentication Required). The attempt for authentication with the proxy server has failed.	In user mode, check the proxy settings.
Transmission has failed.	#875	The HTTP response is 411 (Length Required). The server rejected a request without a defined content length. It may also have rejected the use of chunk transmission.	In user mode, disable (OFF) the following: 'use chunk division transmission for WebDAV'.
Transmission has failed.	#876	The HTTP response is 413 (Request Entity Too Large). The request entity is larger than that assumed by the server or is capable of processing, thus causing the server to reject the request.	Check the server settings.
Transmission has failed.	#877	The HTTP response is 414 (Request URI Too Long). The request URI is longer than that assumed by the server for intermediate processing, thus causing the server to reject the request.	Check the server settings.
Check the server.	#878	The HTTP response is 500 (Internal Server Error). The server has encountered a situation that prevents the execution of the request and that it cannot predict. HTTP response is 506(Variant Also Negotiates). HTTP response is 510 (Not Extended).	Check the server settings.
Check the server.	#879	The HTTP response is 501 (Not Implemented). The request needs a function that the server does not support yet needed for execution.	Check the server settings.
Check the server.	#880	The HTTP response is 502 (Bad Gateway). The proxy has received an illegal response from a server located upstream.	Check the server settings.
Check the server.	#881	The HTTP response is 503 (Service Unavailable). The server has a temporary overload condition or is not capable of handling a request because of maintenance.	Check the server settings.
Check the server.	#882	The HTTP response is 504 (Gateway Timeout). The proxy has sent the request to the server located upstream, but has failed to receive a response.	Check the server settings.
Check the server.	#883	The HTTP response is 505 (HTTP Version Not Supported). The server does not support the HTTP protocol version used by the request message, or it has rejected the support in question.	Check the server settings.

Message	Error code	Cause	Remedy
Check the server.	#878	The HTTP response is 506 (Variation Also Negotiates). The HTTP response is 510 (Not Extended).	Check the server settings.
Check the server.	#884	The HTTP response is 507 (Insufficient Storage). The server has failed to make available a specific amount of memory to process the request.	Check the server settings.
Transmission has failed.	#885	The WebDAV server or the proxy has returned an unexpected status code.	Check the address. Check the proxy settings. Check the server settings.
Check the address.	#886	The HTTP response is 400 (Bad Request). There is a syntax error. This response is indicated when chunk transmission is attempted to ISA in non-SSL mode.	If it is a non-SSL communication and is by way of a proxy, disable (OFF) the following: transmission/reception setup>transmission setup.
Service Call error (E749-0003)	E749-0003	E749-003 boot command in conjunction with an mAccele configuration change	Reset the power (by turning it off and then back on).
	#772	The connection error of Adobe Life Cycle Rights Management server	Check the connection of server
	#773	Exclusive setting error of choosing PDF	Check the optional setting of PDF

T-4-17

Related Service Mode

Invalidating the License for Transfer to a Different Device (Level 2)

Service Mode Item Used to Invalidate a License for Transfer to a Different Device (Level 2)

Possible Situation

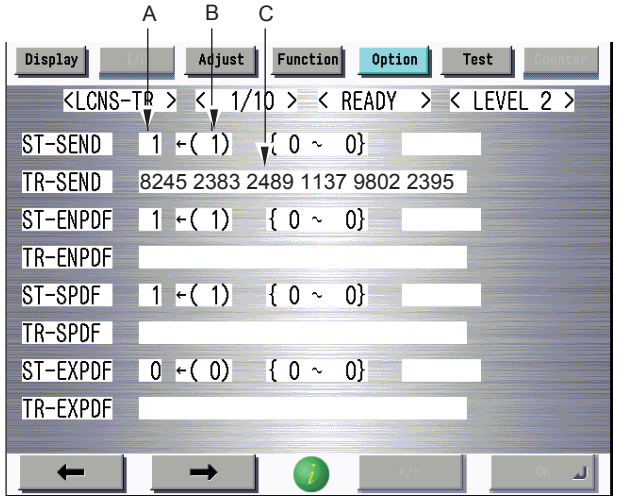
A license may be used on a different device through transfer, as when replacing the device at the end of a lease agreement. To do so, the user must first invalidate the existing license by performing a set of steps referred to as "invalidation of a license" using service mode. At times, both source and target of transfer may be the same device, and a license therefore may also be invalidated only temporarily. It is important to note that the user must contact the Sales Company to make a license good regardless of whether it has been invalidated intentionally or inadvertently.

Invalidation Procedure

Invalidation consists in invalidating the license in service mode and generating an invalidation certificate that proves the completion of invalidation. Invalidation may take place for individual optional functions, and a specific function becomes no longer available as soon as an invalidation certificate is issued. The user contacts the Sales Company and provides the following: the invalidation certificate, the device serial number of the source of transfer, the device serial number of the target of transfer, reason of transfer. In response, the Sales Company may issue a license key for new installation on a different device. The user must take note of the new license key in writing, and keep it as a record after registering it to the target device.

Installation Procedure

1. Start service mode, and activate Level 2 so that the following is true:
COPIER>OPTION>LCNS-TR
The following screen appears, showing the current status of various options:



F-4-37

Screen Design:

SET-xxxx: indicates the license status. If installed, the option is identified as '1' under A.
To invalidate an option for transfer, select it, and type in '0' under B; then, click [OK] so that the option will be invalidated and an invalidation certificate will be issued.
TR-xxxx: indicates any invalidation certificates that have been generated under C.

xxxx may be any of the following:

TR-XXXX	Detail
SEND	SEND function
ENPDF	Encrypted PDF
SPDF	Searchable PDF
EXPDF	PDF Expansion
PDFDR	Direct print PDF
SCR	Encrypted Secure Print
HDCLR	Data Erase(for Old model)
BRDIM	Barcode Printing for PCL
VNC	Remote Operators Software
WEB	Web Access Software
HRPDF	High Compress PDF
WTMRK	Secure Watermark
TSPDF	Time Stamp PDF(JP Only)
USPDF	Digital User Signature PDF

TR-XXXX	Detail
DVPDF	Device Signature PDF
SCPDF	Searchable PDF
AMS	ACQ
ERDS	E-RDS 3rd pty expansion
PS	PS function
PCL	PCL function
PSLI5	PS/LIPS4/LIPS LX function(JP Only)
LIPS5	LIPS LX/LIPS4 function(JP Only)
LIPS4	LIPS4 function(JP Only)
PSPCL	PS/PCL function
PCLUF	PCL/UFR II function
PSLIP	PS/LIPS4 function(JP Only)
PSPCU	PS/PCL/UFR II function(JP Only)
LXUFR	UFR II function
HDCR2	HDD Initialize All Data/Settings
USB-M	Print/sabe from USB
MOBIL	Mobile link func(JP Only)
JBLK	Document Scan Lock
AFAX	Remote Fax
REPDF	Reader Extensions PDF
OOXML	Office Open XML
XPS	Direct print XPS

T-4-18

MEMO
Not all foregoing options are available in all countries and regions.

2. If an option has already been installed, '1' will be indicated under A. If you want to invalidate it, select it, and type in '0' so that the indication under B will change to '0'.

3. Thereafter, when [OK] is pressed, the indication under A will change to '0' and, at the same time, an invalidation certificate will be indicated in the form of a number. Take note of it in writing together with the serial number of the target device.

4. When the target device is ready, check its serial number.

5. Contact the Sales Company, and provide the following: invalidation certificate for transfer, serial number of the source device, serial number of the target device. The Sales Company, in response, may issue a new license key that may be registered on the target device.
6. Register the new license key to the target device, and check to make sure that the function has been enabled.